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How To Feed the Sick

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HOW TO FEED THE SICK

A

HAND-BOOK

OF

DIET IN DISEASE

BY

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To give food and stimulants in the way, at the time, of the kind, with the cooking and preparing, that will best enable the poor enfeebled digestion to assimilate it, is one of the great arts of nursing.

—*Florence Nightingale.*

THIRD EDITION.

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TO THE

TRAINED NURSES

OF

AMERICA,

WHO IN THE

PRACTICE OF THEIR

NOBLE PROFESSION

CARRY PEACE AND COMFORT

TO SO MANY WHITE COUCHES,

AND TO WHOSE INTELLIGENT AID

HIS OWN PROFESSION IS

SO DEEPLY INDEBTED,

THIS BOOK IS

GRATEFULLY

INSCRIBED

BY

THE AUTHOR.

PREFACE.

When entering upon the practice of my profession, I well remember that one of the first questions which greeted me was, "Doctor, what shall I eat?" I also recollect that in the college lecture-room I received no special instruction which would aid me in making a reply, and therefore, from necessity, I early began searching for such information as would enable me to answer intelligently this question, which was almost daily repeated.

While it is expected that the profession may find this book of value when called upon to answer the frequently recurring question which suggested its writing, yet, as the introduction indicates, the object has been to adapt it more particularly to the wants of the people, and to provide for them a *practical* work on the suject of diet in disease—one which they may take into the sick-room and into the kitchen.

Great care has been taken to select only such recipes as have been obtained from reliable sources, and many of them have stood the test of trial in my own practice.

Free use has been made of all works on kindred subjects, and Chamber's "Manual of Diet" has been

consulted, while Niemeyer's, Aitken's and Ruddock's works on Practice, and Ziemssen's Cyclopædia, have contributed valuable hints. Acknowledgment is also due Florence Nightingale's "Notes on Nursing," and the chapter on "The Sick-Room," by Marion Harland.

With this introduction the book is sent on its mission in the hope that it may answer the important question for others, as it has for me.

CH. GATCHELL.

University of Michigan,
Ann Arbor, 1879.

PREFACE TO THIRD EDITION.

The early exhaustion of the previous editions of this work has led me to hope that another may be received with like favor.

Miss M. E. Hemple, Superintendent of the Illinois Training-School for Nurses, has favored me with very many of the recipes which have been added to the present edition, and their value is thus assured, since they have been in practical use in the wards of Cook County Hospital.

The chapter on the *Dietetics of Infancy* has also received careful attention, while many other important changes have been made, with a view to adding to the usefulness of the book.

Hoping that it may be the means of aiding in the restoration to health of many sick ones, it is again consigned to the profession and the people.

CH. GATCHELL.

Chicago, Oct., 1885.

TABLE OF CONTENTS.

INTRODUCTION..... 11.

CHAPTER I.—**How to Feed the Baby.**—The Use of Goat's Milk — Condensed Milk — Cow's Milk — Fat — Caseine – Sugar — Salts—Gelatine – Lime-water - Substitute for Mother's Milk —Food for Infants Under Four Months and Over Four Months—Oatmeal-water—Barley-water ..... 21.

CHAPTER II. -- **The Care of the Milk.** — Testing with Litmus Paper—Milk of One Cow—Preparing Milk for the Baby—Care of the Bottle — Kind of Nipple to Use—Method of Feeding — How to Nurse the Baby — How to Choose a Wet Nurse ..... 31.

CHAPTER III. — **Diet in Cholera-Infantum.** — Rules — Avoid Starchy Food - Give Only Animal Food--Milk – Beef-tea—Wine Whey—Change of Diet—Flour-ball—Bread.. 40.

CHAPTER IV.—**How to Feed Fever-Patients.**—Rules to Observe —Milk Diet—Beef-tea—Wine Whey—Egg Nogg—Broths—Diet for Typhoid Fever — Typhus Fever — Scarlet Fever. ..... 47.

CHAPTER V.—**Diet in Dyspepsia.** — Rules for the Dyspeptic to Observe—What to Avoid—Dishes Allowable—Toast—Dyspepsia Crackers—Clabbered Milk—Brown Bread—Wafers—**Aids to Digestion.**—Pepsin—Digestive Fluid..... 55.

CHAPTER VI.—**Diet in Constipation.**—What to Avoid—What to Eat Oat-meal—Tamarinds—Dishes. – **Rectal Alimentation.** —When Necessary—Rules to Observe—Beef-tea—Defibrinated Blood—Cod-liver Oil..... 66.

CHAPTER VII.—**Diet in Consumption.**—Stimulants Harmful—Meats—Eggs—Milk—Koumiss—Cod-liver Oil—When Indicated—How to Select—Malt Extract—Hypophosphites. ..... 75.

CHAPTER VIII.—**Diet in Diabetes.**—Vegetables Prohibited—Fruits Prohibited—Vegetables and Fruits Allowable—Animal Food Allowable—Rules to Observe—Gluten Bread.—**Milk Cure.**—Rules—Quantity.—**Diet in Bright's Disease.**—Milk Diet.—**Diet in Gravel.**—Must be Strictly Vegetable. ..... 83.

CHAPTER IX.—**Diet for Travelers.**—Light Eating—Vegetables. Diet in Seasickness ..... 93.

CHAPTER X.—**Diet for the Corpulent.**—What to Avoid—What May be Eaten—Dietary for *Breakfast, Dinner, Supper.*—Diet in Scrofula.—Diet in Rickets.—Diet in Scurvy.—Diet in Chlorosis—Diet in Collapse ..... 97.

CHAPTER XI.—**Diet in Rheumatism.**—Meat to Be Avoided—Alkaline Drink.—**Diet in Asthma.**—Dietary for *Breakfast, Dinner, Supper.*—**Diet in Heart Disease.**—**Diet in Alcoholism** ..... 104.

CHAPTER XII.—**Diet in Diarrhœa.**—Light Diet—Gruels—Rice. **Diet in Dysentery.**—**Diet in Cholera.**—During the Attack—After the Attack.—**Diet in Diphtheria.**—Keep the Patient Well Nourished—Milk Punch—Egg Coffee.—**Diet in Inflammation of the Stomach**—The Use of Ice.—**Diet in Biliousness** ..... 110.

CHAPTER XIII.—**Diet for Convalescents.**—Little Appetite till Tongue Cleans—Recipes—Mutton—Game—Chicken—Vegetables—Cottage Cheese ..... 117.

CHAPTER XIV.—**Recipes:**—Beverages—Meats—Oysters—Broths and Soups—Vegetables—Breads—Gruels—Blanc Manges and Custards ..... 123.

CHAPTER XV.—**Soups and Broths.**—Bouillon—Stock—Beef Tea—Mutton Broth—Seasonings—White Soup—Bisque—Sago Broth—Clam Soup—Cream of Celery.—**Miscellaneous**—Cream Lemonade—Slippery Elm Tea—Unleavened Wafers—Cough Syrup ..... 147.

INTRODUCTION.

The human body is composed of a great variety of substances, and yet they are capable of classification into a few simple groups. These substances, which we know under the general name of *foods*, become component parts of our bodies and enter into the composition of living tissues. It is important to the health of our bodies that we receive a due supply of each of these different classes of foods. If we should be entirely deprived of any one class our health would seriously suffer, and sooner or later the body would succumb to the disease which would inevitably result.

These elements are so generally distributed throughout the animal and vegetable kingdoms, among those substances upon which man relies for his sustenance, that it requires little calculation on his part to supply his body with the needed variety. The penalty of a violation of this is seen in scurvy, a disease which follows a diet deficient in potash combined with vegetable acids, and all that is necessary to its cure is to supply the system with food containing those elements of which it has been deprived.

But in disease, on the other hand, the system loses an undue amount of certain elements, and these must

be supplied in increased quantity in order to make up for the rapid loss. Thus in fevers we supply those elements which make muscular and other tissue, which waste very rapidly; in consumption we supply the same, together with fats; in rickets we supply salts of lime, in which the body is deficient.

Accordingly, the regulation of the diet in disease consists in supplying those foods containing the elements which are lacking in the system,* and offering them also in a form to be readily digested and assimilated.

Hence, if we can learn the wants of the system, and if we know in what state to introduce the required aliment, we are prepared to intelligently feed the sick.

To teach this is the design of this work.

As already indicated, foods may be conveniently divided into three different classes, which are named as follows:

Organic { Nitrogenized, / Non-Nitrogenized.
Inorganic.

I. Nitrogenized Foods.

As the name denotes these all contain *nitrogen*. They have for their bases certain principles called

* This, of course, does not apply to diabetes and diseases treated on a similar plan, as the result of experiment; but, as a general rule, it will hold good. I once had a diabetic patient to whom no instructions regarding diet were given, as I wished for a short time to try the effect of medicine uninfluenced by the former. To my surprise the amount of sugar in the urine began to increase rapidly. Inquiry elicited the fact that of his own accord he had begun taking large quantities of sugar *in order to supply the loss*, which he learned was taking place. He was immediately dieted.

fibrin,* albumen and caseine. The chief foods of this class are of animal origin, and eggs, milk, cheese, and *all* meats contain them in abundance. In small proportion, similar principles exist in some vegetables, as gluten and legumine in wheat and peas respectively.

Foods of this class contain a large proportion of nutrient matter, and of a kind which has to go through but few changes before being converted into living tissue. Their chief function is to act as *tissue-builders*. They enter largely into the composition of muscular and other tissue, and hence we give them in fevers, in which there is great and rapid loss of flesh and waste of tissue, in consumption and wasting-diseases generally.

These foods are all digested in the stomach, and hence should not be given in conditions in which this organ requires rest.

Beef is the chief food of this class, and is invaluable in the dietetic treatment of the sick. "One of the most important articles of diet for the sick is beef, and it should be of good quality; the bone should not exceed 20 per cent., the fat should be firm, not yellow, and free from blood, and should not be in too great proportion relatively; the muscle should be firm without being tough, not too pale nor dark-colored, and and should not present any marbling or lividity on cross-section."—(*Bartholow.*)

Mutton is more easily digested than beef and in this respect to be preferred to the latter. It is, however, of less nutritive value. The broth of mutton has a delicate and peculiar flavor which renders it especially agreeable to the sick. It should be well freed from fat.

* This term is meant to include *muscle-fibrin*, called by Flint *musculine*.

Veal is less nutritious than beef, abounding in gelatine. It is also more difficult of digestion than the latter, and has a very limited use in the invalid's dietary.

Venison is more easily and quickly digested than beef, but does not possess the same nutritive value.

Chicken is an important article of diet for the sick and convalescent. It is agreeable to the taste and easy of mastication and digestion. It is not, however, so nourishing as beef, but probably enough so for all ordinary purposes.

Pork, containing as it does much fat, is difficult of digestion and finds no place, either fresh or cured, in the invalid's dietary.

Salted meats are not very easy of digestion. They are deficient in nutritive value and should not be taken by the sick.

Fish is a nutritious food, but not adapted to the wants of the invalid.

Salted fish is difficult of digestion and should never be used by the sick.

Cheese is a rich food and cannot be taken by those with dyspepsia or weak stomachs. In nutritive value one pound of cheese is equal to three and a half pounds of lean beef.

Oysters are highly nutritious, easy of digestion, and usually well borne by a delicate stomach. Simply prepared they form a valuable addition to the invalid's dietary.

Eggs are rich in albumen. They are highly nutritious, generally easy of digestion, and form a very important part of the invalid's food. They should never be cooked more than three minutes. The yolk is more digestible than the white, if hard-boiled. Raw

or whipped eggs are among the most digestible of alimentary substances.

Milk is one of the most important articles of food for the sick, and life may be sustained for weeks on this alone. It is highly nutritious, contains all the elements which enter into the composition of the tissues, and can be served up in many different forms and be introduced into a great variety of other foods. Some diseases can be cured by simply adopting a diet consisting exclusively of milk.

There are some with whom milk disagrees either in health or sickness. This cannot be accounted for, being due to some idiosyncrasy. When this is the case it can sometimes be remedied by adding a little salt to each glass of milk—not enough to make it taste salty. The addition of lime-water to the milk will correct it for others.

Clabbered milk, *sour milk* and *butter milk* are equally as nutritious as fresh milk and will be borne by many stomachs which cannot tolerate the former. These are valuable articles of diet which are too much neglected.

Gelatine belongs to this class. It possesses scarcely any nutritive value, and must not be relied upon as food. On it alone any animal will starve. It may be used as a vehicle for the introduction of other substances, or for its soothing properties alone.

II. Non-Nitrogenized Foods.

The foods belonging to this class are *sugars*, *starches* and *fats*, the first two being exclusively of vegetable origin (liver-sugar being left out of account), while the last-named is produced by both animals and vegetables.

While the nitrogenized foods in the main go to build up tissue, these find their chief use in keeping up the heat of the body.* Hence when the athlete wishes to develop his muscles, he eats beef; when the Esquimaux wishes to fortify himself against cold, he eats blubber.

All the principles of this class are fat-formers. Mr. Banting found sugar to be the most active agent of this kind that he used.

Sugar has a very limited range in the invalid's dietary, being used chiefly for seasoning. It is especially harmful in diabetes. It should never be taken by the corpulent if they desire to decrease their weight.

Sugar-of-Milk is to be preferred to cane-sugar in the preparation of dishes for infants.

Starches form a large and important part of our food. As food for the sick they occupy a prominent place. After the salivary glands become active, starch forms an important part of the infant's diet.

Corn-starch has but a limited use in the invalid's dietary. It can be made into blanc-manges for the convalescent. It is too heavy for most stomachs.

Sago is an excellent form of starch of which to make dishes for the sick, as well as for infants. It is to be preferred to tapioca, a similar product, because the grains are finer and it can be rendered smoother, and hence is easier of digestion.

Arrowroot is another starchy food much used in the preparation of dishes for the sick and for infants. It is excellent of the kind, but it must be remembered that a child will starve if fed on starch alone. Do not

* Although the doctrine on this subject has been modified, yet since each class finds its chief use in the direction indicated, the statement, as made, will stand.

depend too much upon the arrow-root gruel, to the exclusion of other foods.

Wheat. Preparations of this grain form many of the most useful foods known to man. It contains all the elements which enter into the composition of the body. Wheat flour, however, as ordinarily prepared, has been deprived of the most valuable consituents of the grain, the salts and nitrogenous portions. The flour which is made by the so-called "patent process" is not open to this objection. Brown flour, or Graham flour, also retains these elements.

This is a very valuable food and can be prepared in a great variety of forms.

Corn, in the form of meal, hominy and samp, forms an important food, but it finds no place in the invalid's dietary. It contains more oil than the other grains, and it is hard to digest.

Oatmeal has come to be a favorite article of diet with many, but it must be remembered that it is a very hearty food—almost as much so as meat, and it requires a strong stomach to digest it. It is not a proper food for invalids or dyspeptics. It will not hurt *horses*.

Potatoes. These form a valuable food, but are not well adapted to a diet for the sick. They are rich in the starchy elements. The best potatoes are mealy and powdery when boiled. *Young* potatoes, and old *waxy* potatoes are indigestible and should never be taken by those with weak stomachs.

Rice is said to be the chief food of nearly one-third of the human race. It contains a greater proportion of starch than any other vegetable. It is easy of digestion, leaves very little residue, and is a useful food in sickness, finding its chief place in bowel diseases.

Care must be taken to have it well cooked, or it will defeat the very object for which it is given.

Gums, such as gum-Arabic and that which adheres to flax-seed, have the same composition as starch. They possess no nutritive value whatever, but pass through the alimentary canal unchanged, and flax-seed tea and similar preparations are useless as foods.

Fats—including oils—cannot be taken by those with weak digestive powers. They are unfit foods for fever-patients and those who suffer from indigestion. In consumption fats are very useful, not only in supplying the element which is deficient in the system, but also in aiding the nutritive process through the influence which they exert over cell-growth.

Inunctions of oils serve a valuable purpose when it is impcssible to take them by the stomach and yet it is desired to keep up nutrition.

Cream is too rich for most invalids. It should never be used in febrile conditions, but is of value in consumption and wasting diseases.

Butter may be placed in the same category with cream. Consumptives should use it liberally.

Cod-liver oil has a deservedly high reputation in the treatment of a certain class of diseases, especially in consumption. While the *oil* undoubtedly is the important agent, some ascribe to the iodine which all cod-liver oil contains, its peculiar virtue in this disease. It holds an important place also in the treatment of scrofula and marasmus.

Olive oil may be substituted for the cod-liver oil if the latter disagree. It is equally as good as an inunction.

III. Inorganic Foods.

While the principles belonging to this class cannot of themselves support life, yet, since they are as necessary to the proper constitution of the body as any other, they occupy the position of a food and must be considered as belonging to the class of alimentary substances. While some of these go to the formation of solid tissue, as lime in the bones, their general purpose would seem to be to exert some sort of control over the processes of nutrition.

Water is the most important of the inorganic principles. It enters into the composition of all the tissues of the body. Some diseases are much benefited simply by drinking large quantities of "soft" water. The important point to be observed in the use of this principle is to obtain it in as *pure* a state as possible.

Salt enters into the composition of almost all our food, but in insufficient quantities to satisfy the demands of the system. It exerts a favorable influence over the processes of nutrition, and if entirely deprived of it disease will surely follow.

Iron exists in our food, both animal and vegetable, in sufficient quantity to satisfy the wants of the system in health. In those diseased conditions in which it is deficient it must be supplied in increased quantities.

Phosphate-of-Lime is supplied in combination with animal and vegetable foods. When it is deficient in the system, as in rickets, it should be artificially introduced.

CHAPTER I.

How to Feed the Baby.

It is a fact, well known to medical men, that one-third of the children brought into the world die before they complete their fifth year of existence. While there are various causes which combine to produce this fearful rate of mortality, probably there is none which is so directly responsible as improper food and improper feeding. It was his knowledge of this which led Sir C. Clark, an eminent London physician, to say—"The ignorance of mothers in feeding children is worth a thousand pounds a year to me." And this significant statement has been made in various terms by many physicians.

Since the health of the child is directly dependent on the nature of the food which it receives, this becomes a question of vital importance, to which too much attention cannot be paid, and it is designed, in this chapter, to convey to mothers and nurses such information as will enable them to avoid those errors of feeding which are responsible for much of the ill-health of infancy and childhood.

And first, it cannot be insisted upon with sufficient emphasis, that there is no reliable substitute for the mother's milk, and, until the proper period for weaning has arrived, in sickness or in health, the child will

thrive best on that food which was designed for it by nature. Mother's milk is made for babies—cow's milk is made for calves. Human milk has another immeasurable advantage over cow's milk, in that it is *always fresh*.

But the time arrives when a change becomes necessary, and then it is that we must seek for something to replace that food which is now no longer the child's natural aliment, or of which circumstances deprive it.

There are two periods in the infant's life when especial care is called for in the management of its diet—at the time of weaning, whether this be premature or at the usual age, and in its "second summer," when it is so liable to disturbances of the stomach and bowels.

Until the child is old enough to live on a mixed diet, milk is its natural aliment; and the important object to be kept in view is to give it a preparation as nearly as possible resembling the mother's milk, and to give this before any change has taken place in it—that is, before it has in the least degree "turned." While it is true, as already stated, that mother's milk is the child's natural aliment during its nursing life, yet, when the period of weaning has arrived, we are compelled to resort to the milk of the lower animals for its newly-adopted food.

Goat's Milk.

If the child be deprived of its mother's milk, the best substitute is *goat's milk*, if this can be obtained *fresh* and *pure*. As compared to cow's milk, it contains more sugar-of-milk than the former, and it is less liable to become acid. As a substitute for mother's milk I would recommend this above anything else that it is possible to obtain.

But it is so scarce an article in this country that we must seek for something which it is not so difficult to procure.

Condensed Milk.

This must sometimes be relied upon for feeding the baby, and it is to be preferred to ordinary milk, unless you are certain that the latter is fresh and pure. Often, when traveling, we are compelled to rely upon its use, and then it is the best substitute that can be obtained. If it be used at all, the American brands will be found to be better than the Swiss, as the former are more apt to be freshly prepared. Be careful not to prepare it too strong.

Cow's Milk.

After all, our main dependence must be placed upon that milk which all can obtain in such abundance—cow's milk. But in its natural state it cannot be fed to a young child, and it requires some modification in order to fit it for the infant organism. Both cow's milk and human milk contain, in addition to a large per centage of water, which is greater in the latter than in the former, the following elements:

Fat. — This, in the form of minute globules, is distributed throughout the mass of fresh milk. After the milk has stood for several hours it rises to the top as *cream*, and, when churned, becomes *butter*. It is an important element of nutrition, but when given in too great quantity is a source of harm, becoming converted into fatty acids and setting up indigestion. The proportion of *butter* in cow's milk is greater than in human milk.

Caseine.—This is the *cheesy* part of the milk, which coagulates and forms the *curd*. It contains very im-

portant elements of nutrition, but requires strong and healthy powers of digestion to render it capable of assimilation. Cow's milk contains a greater proportion of *caseine* than does human milk.

Sugar.—There is a peculiar form of sugar, known as *sugar-of-milk*, in all milks. This is much easier of digestion than the common cane sugar, which we use on our table. There is a less proportion of sugar-of-milk in cow's milk than in human milk.

Salts.—There are numerous salts in milk, among the more prominent of which are the phosphates of lime, soda, and potassa, all of which perform very important parts in the processes of nutrition. These exist in cow's milk in greater proportion than in human. There is also common salt, or chloride of sodium, which is of equal importance to those already named. There is, relatively, less common salt in cow's milk than in human milk. There is, relatively, a smaller amount of *free alkali* in cow's milk than in human milk, and hence the former is more apt to become acid than is the latter.

A review of what has been given concerning the relative amounts of the different constituents of these two kinds of milk, teaches that in order to so modify cow's milk as to make it more suitable for the baby's use, it is necessary to

Decrease the proportion of
Caseine
and Butter,
and at the same time increase the proportion of
Water,
Sugar,
Common Salt,
and Free Alkali.

Now, if cow's milk be diluted by simply adding water to it, the first of these is accomplished, and the proportion of the solids is correspondingly decreased. But this is not enough. There is still another object to accomplish.

"The important difference between woman's and cow's milk is that the caseine of woman's milk curdles in the stomach into small, light flakes, forming a very loose jelly, while that of cow's milk coagulates into large compact lumps. The loose flakes of the woman's milk are easily digested and assimilated: the firm lumps of caseine of the cow's milk, the infantile gastric juices are incapable of dissolving. They are thrown up again, or wander through the whole intestinal tract as large, sour, undigested masses."—(*Vogel*).

Therefore, in order to render the cow's milk digestible for the infant's stomach, we must prepare it in such a way as to obviate this tendency on the part of the caseine to coagulate into large, compact masses. This we can in a great measure accomplish by diluting the milk with some mucilaginous liquid, which shall hold the caseine in suspension, so that it shall be slowly and gradually attacked by the gastric juice, thus producing a looser clot, on which the digestive fluids and the peristaltic motions of the stomach have a better opportunity to act.

There are several articles which may be used for this purpose. For very young infants the most appropriate are preparations of gelatine, isinglass, or gum Arabic.

Recipe 1.

GELATINE.

Cox's gelatine, one half ounce;
The white of one egg;
Pure soft water, boiling hot, one pint.

Soak the gelatine for about ten minutes in a teacupful of cold water; then pour on to it the boiling water, and stir until the gelatine dissolves. Beat well the white of one egg, and stir it *briskly* into the gelatine solution; put it on a slow fire, and stir *gently* till it boils; take off *as soon as* it boils; let it stand a minute, then *strain well* through a jelly-bag. When cool it will form into a stiff jelly. Keep this well covered and in a cool place.

One-third of a one-shilling package of Cox's gelatine is one-half ounce. Russian isinglass or Cooper's gelatine may be substituted by those who are accustomed to their use.

Recipe 2.

GUM ARABIC WATER.

Dissolve enough pure gum Arabic in two ounces of water to make a thick syrup-like mucilage. Keep this in a wide-mouthed bottle, well corked.

After diluting the cow's milk with water—which process accomplishes the *first step* indicated as being necessary, viz., decreasing the proportion of caseine and butter, as well as that part of the *second* which requires the proportion of water to be increased—it only remains to add those elements which exist in too small a quantity.

And before going further let me give a word o advice concerning the purity of the different articles to be added to the milk.

Water.—Let this be a *pure, soft* water. Above all things is this caution necessary here in Chicago, where, at some seasons of the year, our lake water is so contaminated by the city sewage as to be the cause of much sickness among both children and adults. Use for the baby Waukesha, or some other pure spring-water. That from the Douglas Park artesian well is excellent. If spring-water cannot be obtained, do not use the lake water until it has been first *boiled* and *filtered.*

A very good filter can be made out of a common earthen flower-pot. Get a *new* flower pot, with a hole in the bottom; line it with a piece of *new* canton-flannel; put into the bottom of this, to the depth of two inches, some clean sand; over this put a layer of pounded charcoal, and fill up with fine gravel. This domestic filter will answer the purpose of the most elaborate, and is very easily made. After several weeks' use it should be renewed.

Sugar-of-milk.—Do not use the ordinary cane sugar, but get of some reliable druggist a half pound or a pound of *sugar-of-milk.* This is the kind of sugar which naturally exists in milk, and it is much more easily digested than the former.

Lime-water must also be added, in order to supply the free alkali which, it has been said, is deficient in cow's milk, the absence of which renders it so much more liable to become acid. Or, common baking-soda may be used instead of the lime-water.

Recipe 3.

LIME-WATER.

Get a piece of unslacked lime the size of an egg, break it up, put into a clean quart bottle, and fill up the bottle with rain-water. Let this stand over night; the next morning it is ready for use. There will still be a heavy sediment of lime in the bottom of the bottle, but the water will have taken up all that it can dissolve. When you have used all the water in the bottle, fill up again with water on the lime which remains, and repeat this again and again as long as the lime lasts. Do not shake the bottle, but use the clear lime-water off the top.

Common salt must also be added, for it performs an important part in assisting in the digestion and assimilation of other food elements, and, as compared to the other mineral ingredients, it is contained in cow's milk in insufficient quantity.

Food for Infants Under Four Months of Age.

With the knowledge which we have gained, we are now prepared to compound a food which is recommended as being an excellent substitute for mother's milk.

Recipe 4.

SUBSTITUTE FOR MOTHER'S MILK.

Fresh milk,	1 teacupful;
Hot water,	1 "
Soda (bicarb.),	½ teaspoonful;
Sugar of milk,	1 "
Salt,	A little;
Gelatine,	1 tablespoonful.

First dissolve the sugar, the soda, the salt, and the gelatine in the hot water, and then add the milk.

Make it fresh at each feeding. This is about the right proportion for a baby of four months; under that age decrease the proportion of milk slightly; over that age, increase it. In place of the gelatine, oatmeal-water, barley-water, or gum-Arabic water may also be used, substituting a cupful of either for the pure water which is used when gelatine is employed. The addition of some gelatinous fluid seems to favor the digestion of the milk.

Food for Infants Over Four Months of Age.

In preparing food for infants over four months of age, the proportion of milk should be increased and also we may add some preparation possessing nutritive value. This will be found in oatmeal-water and barley-water.

Recipe 5.

OATMEAL-WATER.

Oatmeal, – – –	one teacupful;
Cold water – – –	one pint;
Salt, – – – –	one saltspoonful.

Stir the oatmeal and the salt into the water and let it soak over night, or all day. *Strain thoroughly* through a *thick* napkin. It is very important that this be well strained, so as to leave no solid particles of oatmeal, as their presence in the child's food would irritate the bowels, and set up trouble which did not previously exist.

Recipe 6.

BARLEY-WATER.

Pearl-barley,	two tablespoonfuls;
Water,	one pint;
Salt	one saltspoonful.

Wash the barley and soak it half an hour in a little luke-warm water previously salted. Pour it into a pint of boiling water, letting it simmer one-half hour. When done, strain into a pitcher.

Now the baby's food may be prepared by adding to the milk oatmeal-water, or barley-water. For a single feeding, take of

Recipe 7.

Milk,	one teacupful;
Barley-water,	one teacupful;
Sugar-of-milk,	one teaspoonful;
Lime-water,	two teaspoonfuls;

Heat this by setting the vessel in which they are mixed in a pan of hot water. When warm it is ready for the bottle.

These preparations of oatmeal and barley are nutritive, and at the same time, from their bland, mucilaginous character, they aid the digestion of the milk by preventing the formation of hard lumps of caseine.

Use the oatmeal-water if the bowels be inclined to constipation; the barley-water if the bowels be loose.

CHAPTER II.

The Care of the Milk.

The following directions, though they may seem to be unnecessarily minute in detail, are of the utmost importance, and Florence Nightingale, than whom there is no higher authority on the subject, would consider that the half had not been told. Although it involves some trouble (if it be so considered), yet it is much less trouble than it is to care for a sick baby, and too much attention cannot be paid to this subject.

Have the milk brought to the house *twice* a day, and let the morning's supply be brought as early as possible. Be sure that this is not the milk of the previous night. As soon as the milk arrives, test it to see if it is sweet. Keep on hand at all times some blue *litmus paper*. This can be obtained at any drug store. Take a piece of this blue paper, about the size of the large blade of a penknife, and dip it into the milk. If the paper turns from *blue* to *red* in color, it indicates that the milk is *acid*,—it has begun to *sour*, and is unfit for the baby's use. Throw it away, or use it for some other purpose, and get some *sweet milk* for the baby.

By dipping a piece of litmus paper into vinegar, or any other acid, you can see the character of the change which will take place if it be dipped into *sour* milk. If the change in color be but *slight*, it is enough to condemn the milk.

Test the milk with *litmus*, not only when first brought to the house, but at intervals during the day, when you are about to prepare each fresh mess of food. If at any time the litmus shows it to be "turned," get some fresh milk for the baby.

If possible, let it be the milk of but *one* cow. If the milk of but a single cow cannot be obtained, that from a number of cows, mixed—as ordinarily contained in a dairyman's milk can—will be more uniform in quality than if frequent changes be made.

Do not let the milk-man bring you skim-milk. If the milk has already been robbed of its cream, then this deficiency must be supplied by the addition of a little cream obtained from some other source.

In hot weather the milk intended for the baby's use may be *scalded* as soon as received. Do not let it boil, but just scald it. If it should boil, throw it away and get a new supply. If scalded it will keep better. Keep the baby's milk separate from that intended for general use.

As soon as the milk is received add baking-soda in the proportion of one teaspoonful to a quart of milk.

All pans and other utensils which may contain the milk, should be well scalded and scoured, washed with soda, rinsed with clean, cold water, and dried.

The best vessel in which to keep the milk is a crock, which should be kept for the purpose, and should be well scalded, scoured, rinsed and dried as soon as emptied. Keep two such crocks, and let one be drying while the other is in use. Cover the crock with a clean, folded napkin, or folded towel (this excludes the air more effectually than can be done by a dish or hard cover) and set it in the coolest place to be found, going

to it as often as necessary to dip out—with a *clean* cup—the small quantity wanted for the baby.

If the air of the refrigerator is not laden with the odor of cooked meat and vegetables, this will be the best place for it. Otherwise set the crock in a pan, surround it with ice or cold water, and set it in the cellar.

Remember that milk has a remarkable property of absorbing odors and deleterious matters, and it should be kept in the *purest* atmosphere that can be found. The germs of disease, absorbed from the atmosphere, have been known to be conveyed in milk.

To Prepare the Milk for the Baby.

Take from the crock enough for *one feeding*, and prepare it as already directed. If the milk-man has already anticipated you, do not add so much water.

Put the milk into the nursing-bottle, and use *immediately*. After the child has had sufficient, *throw the rest away*—it is the best economy in the world!

If allowed to stand in a warm place, it soon becomes unfit for use. Prepare it *fresh*, according to the above directions, every time the child needs feeding. Do not use the same bottle of milk throughout the night—prepare it fresh at each feeding, as you would during the day.

Never put a second supply of milk into a bottle containing the remains of a former—use a fresh and clean bottle, even though no more than an hour has elapsed since the last one has been used.

In *Maternité* hospital, Paris, all infants are fed with cup and spoon, on account of the difficulty of keeping bottles sufficiently clean. Try this if the baby does not thrive.

The Care of the Bottle.

At least *three* bottles should be kept for the baby, that two may be going through the cleansing process while one is in use.

Select a stout bottle, having *no lettering* on it, and with *no sharp angles*. If there be a sharp angle in the bottle, or any lettering blown into it, such an out-of-the-way corner can harbor a speck of old milk, which is sufficient to set up fermentation in any amount of new.

As soon as the child has taken enough for one feeding, empty from the bottle what remains and *without delay* scald and wash the bottle with hot water and soap. After scalding, put the bottle into a basin of clean cold water, in which a little soda has been dissolved. Let it remain in the soda-bath for half an hour, then take it out, rinse it in clean water, and let it dry by hanging it inverted on a peg.

It is important that this process should be gone through with after every feeding. A nursing-bottle which contains but a *mere trace* of old milk—so small a quantity that it can scarcely be seen—is sufficient to spoil all that is afterwards put into it, and thus derange the child's stomach and bowels.

Use a simple, thimble-shaped, black rubber nipple. Black rubber is purer than the white—the latter contains injurious ingredients. But above all things I would caution you against the use of the style of nipple consisting of a little rubber bulb for a mouthpiece, a rubber tube leading to the bottle, where it passes to the cork, terminating in a glass tube reaching to the bottom of the bottle. They are the invention of some Herod, intended for lazy folks, and could not have

been better devised if they had been calculated for the purpose of slaughtering every innocent who grasped them in their mouths. They are pernicious in the extreme, and the cause of much sickness. They contain so many obscure crevices that it is absolutely impossible to keep them clean. I have cut open the tubes belonging to several of these, which had been in use for some time, and found every one inhabited by a fungous growth, which would contaminate every ounce of milk passing through them.

The plain thimble-shaped, rubber cap is the only suitable nipple to use for the baby's bottle.

Feeding the Baby.

The *quantity* to be given at each feeding will vary with the constitution and temperament of the child. A little experience will teach how much the child cares for, and afterwards the amount prepared can be regulated accordingly. About four ounces at a feeding is sufficient.

Do not *over-feed* the baby. Children often suffer from *too much* feeding. Instead of giving the breast or the bottle every time the child cries, give it occasionally *a drink of cool water,* and it will express satisfaction and become quiet. Children often suffer from thirst, and only take the milk which is offered because you do not give them water. Try this.

Do not feed the child while on its back, or lying down. Do not bounce the baby about after feeding, lest it throw up what it has taken. Let it lie quietly for at least half an hour.

How to Nurse the Baby.

If both mother and child are in good health, no directions on this subject are necessary more than the dictates of nature afford. Young mothers, however, commit a few errors which, with a little instruction, they may be spared.

And first, do not ruin a child's health by putting it to the breast every time it cries. This is the only means it has of expressing its emotions. "If it is hungry, it cries; if it is overfed it cries; if it suffers from the prick of a pin, it cries; if it lies too long in one position, so as to receive undue pressure on any one part, it cries; if it is exposed to cold, or any part of its dress is too tight, or it is held in an awkward position, or is exposed to too bright a light or too loud a sound, it can indicate its discomfort only by its cries. And yet the one remedy of ignorant nurses for so many different evils is, not to find out and remove the true cause of offense, but to offer the child the breast."

If you have *regular intervals* for nursing, the child will be less apt to fret for the breast than it will if it is given whenever it cries or becomes uneasy.

As a rule, during the *first* month of life the child should receive the breast about every *two hours* during the day, and about *three times* during the night.

After the first month the intervals may be lengthened, and it may then be fed about every *three hours* during the day, and only *twice* during the night.

The infant should be fed in this way until after the appearance of the first teeth, or until it is eight

or nine months old. Prolonged nursing is injurious to both mother and child.

A mother who is consumptive or scrofulous should not nurse her children.

A mother who is very excitable, or subject to fits of violent passion, should not nurse her babe. Do not put the child to the breast after hearing any depressing news, or suffering from fright. Convulsions and death of the child have been known to follow a violation of this rule.

Great attention should be given to the care of the nipples, for soreness of these may cause a similar condition of the child's mouth. Before each nursing wash the nipples thoroughly with a weak solution of baking soda (bicarbonate of soda).

If the nipples have already become sore, wash them with a little warm water and soda before and after each nursing, dry thoroughly and gently, apply a little olive oil to the surface and cover with a nicely-fitting India-rubber shield while suckling.

How to Choose a Wet-Nurse.

Almost all that can be said on this important subject is poetically expressed in the following lines from Saint Marthe in Pædotrophia:

"Choose one of middle age, nor old nor young,
Nor plump nor slim her make, but firm and strong;
Upon her cheek let health refulgent glow
In vivid colors, that good humor show.
Long be her arms, and broad her ample chest,
Her neck be finely turned, and full her breast;
Let the twin hills be white as mountain snow,
Their swelling veins with circling juices flow;
Each in a well-projecting nipple end,
And milk in copious streams from these descend.
Remember, too, the whitest milk you meet,
Of grateful flavor, pleasing taste, and sweet,
Is always best."

The nurse should, of course, be in *perfect health.* Reject those who are cachectic, or who have any taint of scrofula, consumption, tubercular affection, specific disease, or other communicable malady. There should be no return of her catamenia.

As these points should in all cases be referred to the family physician, it is not necessary to give specific instructions in a work of this character.

Her age should be but little, if any, greater than that of the mother.

Her breasts should be full, plump and well formed, and she should be able to suckle with *both* breasts.

There is danger of the child becoming deformed, or squinting, if it nurse on but one side.

The nipples should be prominent, so as to be easily grasped by the child, and be free from cracks or sores.

The milk should flow freely, and when dropped in water produce a cloudy appearance, and not sink to the bottom in thick drops. The nurse's milk should not be older than the child which is to be nursed. There is less objection to giving "young milk" to an older child. Milk that is over twelve months old should not be depended upon to nourish a young babe.

If for any reason a mother is unable to nurse her babe, then it is wise to provide a *good* wet nurse. But let me caution physicians and mothers against getting a wet-nurse for a *sick baby.* With intelligent care it is possible to administer to the child any desired variety of food, and the physician has the matter of nutrition entirely within his own control, but if a wet-nurse enter into the problem, you have all the annoyances of sore nipples, mental emotions and caked breasts to contend against, and you have no more control of the child's diet than you have of the clouds in the heavens.

How to Wean the Baby.

If there be nothing of special importance to demand the weaning of the child at an earlier period, this should be begun when it is about nine months old, by which time it will generally have cut several teeth. In fact, the weaning should not be begun until two or more teeth have made their appearance.

Begin the weaning when the child is strong and well. If it has become reduced by disease, or is suffering from an acute attack, postpone the ordeal until it is again in good health.

Do not wean during the summer season. Select a season of the year when the weather is moderate. March, April or May are favorable months, as are also October and November.

Prepare the child for the weaning process by getting it gradually accustomed to other food besides its mother's milk. Give milk from a bottle, or feed it soft spoon-victuals, such as arrow-root, sago, cracker soaked in milk, or any of the numerous articles recommended in the next section.

At the same time give the breast at *longer intervals*, so as to accustom the child not to expect it.

When you once begin the weaning process, be firm and unrelenting; take no back-steps.

The process should occupy about twelve or fourteen days, so that at the end of two weeks, at the most, the breast can be entirely dispensed with.

It is better to excite an aversion to the breast than to have the child fretting for it. This can be done by touching the nipples with some bitter substance, such as a little salt or soap.

After weaning, it is important that the child's stomach should not be overtaxed. Often at this time the foundation of a weak stomach is laid.

CHAPTER III.

Diet in Cholera-Infantum.

Many of the directions already given will also apply to the feeding of the baby in cholera-infantum, or "summer complaint." It is even more important at this time that the strictest attention should be given to the care of the milk and nursing bottle. Keeping this in mind, the proper care of the infant during the summer months may be summed up in these three

RULES:

Keep the baby cool;

Let it have plenty of fresh air;

Let it have no food in which the process of fermentation has begun.

If these instructions be rigidly observed, the child need not see a sick day.

The first and most important thing to learn in the dietetic treatment of cholera-infantum, is to

Give no starchy foods whatever!

Flour, arrow-root, sago, and the like will do absolute harm, for they will *ferment* and aggravate the disease. In fact, the use of starchy food, or food containing

starch, is in many instances the direct cause of summer diarrhœa and *cholera-infantum*.

In order to digest starch it requires an active secretion of the juices of certain glands — the salivary glands and the pancreas—which in young children are still undeveloped. This, and the further fact that *milk*, the food which mother Nature has prepared for infants, contains *no starch whatever*, is sufficient indication that it should not form a part of their diet. Nor is this deduction necessary, for practical experience teaches the same lesson.

Hence, bread, crackers, rice, arrow-root, sago and other food containing *starch*, should be carefully excluded from the infant's dietary.

Dr. C. H. F. Routh, of London, says: "I cannot conceive of anything more injurious than this popular arrow-root feeding. I believe it is a cause of the death of many infants."

In the Foundlings Hospital, in Paris, M. Guillot noticed one season that the mortality rate was unusually great. On investigation he found that the passages from the bowels of almost all the children had a jelly-like appearance. He applied iodine to it, with the result of changing its color to a deep blue, thus showing that the starchy food was passed entirely undigested.

This is an experiment that any mother can repeat. Get at the drug store half an ounce of tincture of iodine. If there be a suspicion that there may be undigested starch in the stools, drop a little of the iodine into it. If it turns *blue* where the iodine touches, it is positive evidence of the presence of starch.

Hence, all food given at this time should be of animal origin.

SCALDED MILK

may be given, if retained on the stomach. Prepare it with lime-water and sugar-of-milk, with a small pinch of pepsin in it. Condensed milk may be used if perfectly pure and fresh milk cannot be obtained.

BEEF-TEA.

When the child is in a weak and low condition, beef-tea (page 51) is to be preferred to all other foods. Give a *good* article of beef-tea, as much as the child can take and retain, repeated at frequent intervals. Remember that in that low and prostrate condition into which children with this disease so rapidly run, beef-tea is the most important dietetic article that can be given. It is stimulating, and rouses the waning strength. After getting up a reaction by its use, give again condensed milk, fresh milk, or infant's food.

Recipe 8.

RAW MEAT.

Scraped beef has been successfully used in the dietetic treatment of cholera-infantum. Take a piece of fresh beef with one surface cut across the grain; scrape this surface with a spoon until as much of the *pulp* is scraped off as possible. Now, with a sharp knife, take off a thin slice and make a fresh surface and scrape as before, repeating this until it has all been reduced to a soft *puree*. By this method the indigestible fibrous part of the meat is rejected. Feed this *puree* to the baby, after adding a little fine salt to it. A little pepsin will aid its digestion.

Many sick children have been brought up from very low conditions on this diet alone.

Recipe 9.

ALBUMEN WATER.

Cold water, – – – one half pint;
Whites of two eggs;
Sugar-of-milk, – – – one teaspoonful.

Drop the whites of the eggs into the water and stir *gently*, without beating, until they are well mixed. Sweeten. Give cold or frozen.

This will sometimes be found to be a valuable aid in nourishing a child when sick with diarrhœa.

Recipe 10.

WINE WHEY.

Fresh milk, – – – one pint;
Sugar-of-milk, – – – one teaspoonful;
Sherry wine, – – one teacupful.

Heat the milk to the boiling point, and add the wine. Let it simmer gently until the curd forms. Strain through a cloth and sweeten with the sugar.

This will sometimes agree with the sick child when other foods fail.

Sometimes, when the child is very low, a little brandy added to its food helps to stimulate and get up a reaction.

Koumiss (page 78), will be eagerly taken by some sick children when all other foods are rejected, and many sick babies have been brought up from very low conditions on this alone.

The preparations of milk, with gelatine, gum arabic, or barley water, may be tried if other foods disagree. Sometimes what agrees in one case will fail in another, and we must change until a food is found which will suit the given case. It is thought that it will not often

be necessary to search outside of those here recommended.

The natural reaction of the contents of the bowels is *alkaline*. In *Cholera infantum*, or the bowel complaints of infancy, they often become *acid* in reaction, and then the stools become green in color, for acid, acting on the *bile*, with which all healthy passages are colored, changes it from a yellow, the natural color, to green. Hence, a change in color from green to yellow is favorable, for it shows that the secretions are losing their acid character.

Change of Diet.

Milk should form the child's food for the first six months. No starchy food is needed, nor can it be digested until the teeth appear, and the "dribbling" shows that the glands are secreting an abundance of saliva. Before this the child can starve on arrow-root and other starches. Even after this period the diet should still consist principally of milk, to which may be gradually added simple articles of food after the child is a year old.

At this time the best thing with which to thicken the child's milk, in order to add to its nutritive value, is the flour ball.

Recipe 11.

FLOUR BALL.

Flour, – – – one pound;
Salt, – – – – one teaspoonful;
Sugar-of-milk, – – one teaspoonful;
Cold water, – – – four tablespoonfuls.

Mix these well together; tie the mass up tightly in a stout muslin cloth, or a pudding-bag, so as to form a firm ball. Boil this in a kettle of water *from early morning until bedtime*. Take it out and hang it up to drain and dry. The next day open it and peel off from the surface the layer of dough which will be found. There will remain a *hard, solid ball*. Dry this in the sun or in the open oven. Keep it in a dry, cool place, and, as it is needed, shave off from one side two or three teaspoonfuls, make this into a paste, free from lumps, with a little water, stir this into a pint of milk and scald it, being careful not to let it boil.

In the flour-ball the starch of the flour is changed into dextrine, which makes a highly digestible and nutritious food for infants. You need not seek further or ask for greater variety—the child will thrive well on the milk and dextrine.

If the sugar-of-milk be not at hand, it may be made with this omitted.

Recipe 12.

Bread Jelly.

A quantity of the soft part of a loaf is broken up, and boiling water being poured over it, it is covered and allowed to steep for some time; the water is then drained off completely and fresh water added, and the whole placed on the fire and allowed to boil slowly for some time until it becomes smooth; the water is then pressed out and the bread, on cooling, forms a thick jelly, a portion of which is to be mixed with milk or water, as wanted.

This bread jelly, recommended by Dr. Churchill, is very nourishing, and can often be taken when other things disagree.

But milk should form the chief part of the child's diet until it has passed the period of dentition, or until it has as many as twelve teeth. With some children this will not be until they are two years old, while it will occur earlier with others.

"Well-made broths of chicken, mutton or beef are valuable at this time as a change. One small meal of a finely-cut, rare mutton-chop, slightly seasoned, with the soft part of a slice of milk-toast, or a soft-boiled egg, may be given at first, very sparingly, at midday meal; or, better still, the wing-bone of a well-boiled chicken, with all of the gristle cut off, will pave the way. A small quantity of the well-chopped white meat of a thoroughly boiled chicken, not more than a teaspoonful, may be tested, and this can be followed by a mealy, well-roasted potato, seasoned with butter and salt, and well mashed. Some well-boiled rice, with gravy of beef-juice, will do well for some. Beware of other food; a taste of this or that which happens to be on the table, will only spoil the child and give you great anxiety by the subsequent disturbance of the bowels which it will cause."

And above all, avoid the pernicious practice to which so many are addicted, of feeding the child on candy. It destroys the appetite for wholesome food and injures the teeth. In moderate quantity, fresh, ripe fruit will do no harm, unless the bowels be already too loose.

CHAPTER IV.

How to Feed Fever-Patients.

There is good reason to think that in times past many fever-patients were literally starved to death for want of food to nourish them, as well as famished for want of water to liquefy the blood and cool their parched and bleeding lips. But this practice is now abandoned, the old notion that we should "stuff a cold and starve a fever," has long since given way to the modified doctrine that both the cold and the fever should be well fed.

It was the great Dr. Graves, of Dublin, who said that he desired no greater epitaph on his tombstone than simply the three words, "He fed fevers." To the reform which he thus initiated we owe many lives, for, no doubt, under the old and erroneous method of keeping the patient on a low diet for fear of adding "fuel to the flames," many poor victims were actually starved to death when recovery would have followed had they been properly nourished.

But care and judgment in the management of the dietetics is as important as the medicinal treatment itself, and a certain plan must be observed. The instructions which follow will apply to almost all the acute fevers. It is well to keep in mind a few general

RULES.

1. Give *no solid food* to a fever-patient.
2. Let the food be *simple* but *nutritious*.
3 Give food at *frequent intervals* and in *small quantities*.

4. Let a fever-patient have all the cold water that he wants to drink.

5. Solid food given during convalescence will often cause a relapse.

6. If the patient be properly nourished from the outset there will be little need of alcoholic stimulants.

Remember also that those fever-patients who have been properly nourished will make the best recoveries.

If the patient's mouth be foul, the lips, teeth and tongue covered with "sordes," before giving food cleanse the mouth with cold water containing a little lemon-juice, using a swab or the corner of a napkin. A little of the liquor-permanganate-of-potash may also be used for this purpose.

When a patient is weak and lying on his back, it is exceedingly tiresome for him to take food or drink a spoonful at a time; even this slight effort wearies him. At such a time none but liquid food should be given, and this through a bent glass tube.

Food for fever-patients should be *fluid in form, easy of digestion and highly nutritious.*

Milk.

No better form of food than this can be chosen, if it agree with the patient.

Give to the patient regularly every two hours a teacupful of milk. This may be fresh from the cow, or scalded, or ice-cold, to suit the fancy of the sick one. When but little food can be taken it is a good plan to have a pitcher of iced-milk, and when the patient complains of thirst give this instead of water. Typhoid-fever patients who are fed on nothing but milk throughout the course of the disease make excellent recoveries. The best way of administering it is to let the patient draw it through a bent tube.

If the milk disagree or be thrown up curdled, a tablespoonful of lime-water to a cup of milk may prevent this.

Buttermilk

may be given instead of sweet milk. It is both refreshing and nutritious. It should be fresh, and, like the milk, given in small quantities frequently repeated. Its tendency is to allay fever.

To some patients milk is repugnant. To others its continued use will render it so. Its use may then be varied by giving gruel.

The perfection of gruels should be, according to Miss Austen, "thin, but not too thin ; thick, but not too thick."

For the first three days of the fever, if the patient receive oatmeal gruel the waste of tissue which occurs during that time will be fully met. The oatmeal, however, should be *thoroughly well boiled*. If it be underdone more harm than good will follow.

Recipe 13.

Oatmeal Gruel.

To two tablespoonfuls of oatmeal add two tablespoonfuls of water, and make a *smooth* paste. Stir this into a pint of *boiling* water, and boil for half an hour, stirring well. Add a little salt, and strain through muslin. If too thick, thin with a little milk.

Later in the course of the fever the patient requires food which is *stimulating* as well as nourishing. But unless the patient is in an asthenic, *i. e.*, a weak and low condition, preparations containing alcohol should not be given. If, however, there is great prostration with weak and feeble circulation, alcohol is indicated.

Beef-Tea.

This much-abused article will find its chief use in those weak conditions in which the patient needs stimulating. There is very little nourishment in it, but it seems to have a remarkable power of sustaining life out of all proportion to the amount of solid matter which it contains.

If a patient has a continued fever and it is known that beef-tea will be wanted from day to day, too much pains cannot be taken in its preparation. It is well to observe the following

RULES:

1. Never let beef-tea boil.
2. Always begin with *cold* water.
3. The finer the beef is cut the better.
4. There should be no fat, gristle or bones adhering to the meat.
5. The proper proportion of beef and water is a pound to a pint.
6. Beef-tea that "jellies" when cold has not been properly made.
7. After being made, carefully remove from the surface all traces of fat.
8. To "warm up" beef-tea, put it in a cup and set the cup in a vessel of boiling water.

To get *all* the virtue of the meat the following recipe is the best:

Recipe 14.

Beef-Tea.

Take one pound of fresh meat, cut very fine, soak in one-third of a quart of cold water over night. In the morning remove the meat, saving the water in which it has soaked. Put the meat into two-thirds of

a quart of water and let it simmer for two hours, keeping the water up to its original level by replacing what is lost by evaporation. Now pour the beef-broth into the cold liquor in which the meat was soaked, squeezing the meat as dry as possible.

The meat which remains should be spread on a tin plate and slowly dried in an open oven. When perfectly dry it can be easily reduced to a powder in a mortar. Mix this meat-powder in the liquor and you have all the elements of the meat in a fluid form. Salt to taste and add twenty drops of muriatic acid and three grains of pepsin.

This is the *only* preparation of beef-tea which contains *all* the virtue of the meat. Other beef-teas are stimulating, but they have no nutritive value whatever.

A simpler method, and one which will answer for ordinary purposes, is the following:

Recipe 15.

BEEF-TEA.

Prepare a pound of beef in the usual manner and soak it in a pint of cold water for two hours. Now place the vessel containing the meat into a sauce-pan of water, and let the water in the latter boil for three hours (putting the meat and water into a stone bottle and this into a kettle of boiling water answers the same purpose). Replace water that is lost by evaporation. When done strain and salt to taste. The last vestige of fat may be removed by skimming the surface with a piece of white blotting-paper.

Recipe 16.

WINE WHEY.

Fresh Milk, – – one pint;
Sour wine, – – – one wineglassful;
Sugar, – – – one teaspoonful.

Put the milk into a shallow saucepan and let it come to a boil; as soon as it reaches this point, add the wine, slowly, skimming off the curd which rises, for about fifteen minutes. Add a tablespoonful more of the wine, skim off what curd remains, and it is ready for use. Sweeten to taste and season with nutmeg, if allowable.

Whey is not very nourishing, but prepared in this way it is refreshing and stimulating.

Recipe 17.

EGG-NOGG.

One egg;
One tumbler of milk;
One desertspoonful brandy;
One desertspoonful sugar.

Carefully scald the milk and let it afterwards become cold. Beat the sugar and egg up together to a froth, put into a tumbler, add the brandy and fill up with the milk. If wanted in a hurry the milk may be used without scalding.

This is stimulating and nutritious.

After the stage of depression has passed the stimulating food may be dropped and a return made to simple, nourishing, easily-digested articles. Food should be given yet with great care, especially in typhoid, and *nothing solid* should be swallowed by the patient. Give again meat broths, milk, and the like.

Recipe 18.

MUTTON BROTH.

Fresh mutton, - -	one pound;
Cold water, - - -	one quart;
Salt, - - - -	one teaspoonful.

Take a pound of fresh mutton, free from fat; cut into thin slices with a sharp knife; put into a suitable dish, salt, pour over it a quart of *cold* water and let it *simmer* over a slow fire for an hour, then let it *boil* for an hour longer. Strain off the broth through a sieve, refusing the meat fibre. Season with salt.

Recipe 19.

BEEF BROTH

may be made according to the same recipe, taking a pound of beef free from fat. A piece of the neck or shoulder is best. These broths may be thickened with sago if desired.

Recipe 20.

CHICKEN BROTH.

Take a tender chicken; remove the skin and all fat. Cut it in two longitudinally and remove the lungs, which will be found attached to the back. Now cut these halves into small pieces, cutting through bones and flesh. Put these pieces into a suitable dish, salt, pour on a quart of cold water and let it *simmer* for an hour and a half, then set it on a hearth or back of the stove and keep up the heat for half an hour longer. Strain through a sieve or coarse towel to separate the broth from the bones and fibre. Season to taste. Thicken with a little flour or sago if desired.

The yolk of an egg beaten up in any of these broths adds greatly to their nutritive value.

This dietary is intended to apply to any of the essential as well as to the symptomatic fevers. But some of them require special mention.

Typhoid Fever.

This fever is generally protracted and exhausting, and the diet needs careful attention, especially when

convalescence approaches and the appetite returns. Relapses are often brought on by some error in diet or over-indulgence. *No solid food* should be taken until health is *fully restored*. It must be remembered that the lining-membrane of the intestines has been ulcerated, and for some time after the patient is up it is in a very sensitive state, and extreme care must be observed lest the inflammation be again aroused. So simple a thing as eating too much boiled rice has brought on a fatal relapse. A diet consisting *exclusively of milk* may be depended upon in this fever. Let the milk be scalded. Give this throughout the entire course of the disease, and until convalescence is far advanced. There is no better diet in typhoid fever.

Typhus Fever.

In this fever there is great and rapid destruction of tissue, and it is highly important that this loss should be met, from the first, by very nutritious food given *regularly* and *persistently*. If the prostration be great, give beef-tea and egg-nogg. If swallowing becomes impossible, life may still be supported by nutrient enemata.

Scarlet Fever.

While the general dietary already given will apply to this fever, yet, since there is usually some inflammation of the stomach attending it, the food must be especially bland and unirritating. Only a small quantity should be given at a time, and it will be better borne if it be *cold*. Iced milk, iced barley-water, and the like, will agree better than warm food. A milk diet fulfills all indications in this fever, and is especially useful in that its tendency is to act as a diuretic, and thus keep the kidneys freely acting.

CHAPTER V.

Diet in Dyspepsia.

Since this disease is generally produced by errors in diet, no plan of treatment which does not involve a careful regulation of this important matter can ever be successful in effecting a cure. While it is true that "what is one man's meat is another man's poison," yet a strict observance of the dietary here given cannot fail to benefit every case, and it will cure in many. It is important to the success of the treatment that, once begun, it be faithfully carried out, and the instructions given be rigidly observed. If this be done, it is not too much to say that every sufferer from this very common complaint may be restored to a state of health.

Dyspeptics should adhere to the following

RULES:

1. Eat slowly.
2. Masticate thoroughly.
3. Never eat when tired.
4. Avoid exercise immediately after a meal.
5. Do not eat "between meals," or be constantly "nibbling,"
6. Never overload the stomach, or eat until you feel *oppressed*.
7. Do not drink large quantities during or after a meal— a *moderate* quantity will do no harm.

What Dyspeptics Should Not Eat.

Peas,
Beans,
Hash,
Ham,
Fish,
Cakes,
Cheese,
Cabbage,
Cucumbers,
Confections,
Pastries.
Herring,
Sausage,
Sardines,
Mackeral,
Salt-meats,
Fresh bread,
Griddle-cakes,
Raw vegetables,
Young potatoes,
Old, waxy potatoes.

Drink no tea or coffee.

Never eat meat that has been twice-cooked.

Fats and pastries are especially to be avoided.

Eat no sweet puddings, sauces, or the like, at the end of a meal.

Flatulence is more apt to follow the use of vegetable than of animal food.

Some can eat with impunity what disagrees with others; avoid everything which disagrees with *you*.

The use of alcoholic beverages will produce dyspepsia, and aggravate one already existing.

Eat *no fresh bread*. All bread should be stale or toasted, and the crust is to be preferred to the crumb. And in his connection I take pleasure in giving the remarks of a lady who is performing a very praiseworthy work in liberating the people from the thralldom of bad cookery. It is called

A Talk About Toast.

"Mrs. E. P. Ewing, in a lecture on cookery, at Dearborn Seminary, said that toasting effectually

destroyed yeast germs in bread, and converted the insoluble starch into a soluble substance resembling gum, and which chemists called dextrine, so that toasted bread was incapable of fermenting and producing flatulence, or becoming sour on the stomach. Bread toasted very dry agreed better with a weak stomach than any other bread. Indeed, a sensitive stomach would frequently digest toast when it would digest no other article of food. Hence toast, which was in general use as a diet for invalids, could be safely and judiciously recommended for them at all times; and the loose talk indulged in by some self-styled teachers of physiology about the extreme unhealthfulness of toast, especially when buttered, only gave emphasis to the fact that toasting bad bread and melting bad butter did not improve the quality of either, or render them less indigestible or unwholesome than when in their original unregenerate condition. Melting or boiling inferior butter would not make it proper food for a human stomach, and the most skilful manipulation would not convert sour, half-baked bread into nutritious, palatable toast. The latter held so important a place among foods that every one should know how to make it properly. Yet one of the best American authorities on culinary matters has said that only about one in 10,000 knew how to make toast, and the lecturer indorsed the statement, so far as to assert that bad toast was the rule, and good toast the exception.

In making toast three directions should be observed: Cut the bread, which should be somewhat stale, in even slices, about half an inch in thickness. If the bread is fresh, slightly dry them. Hold each slice a sufficient distance from the fire, which should be of clear, bright coals, to keep it from burning, and let it brown

evenly. For this purpose a wire broiler or a toasting fork can be used. When the surface of one side becomes a rich, golden color, turn and heat the other side in a similar manner, until the slice is perfectly toasted. Serve the moment it is done in a warm plate, dry or buttered, and it will tempt the appetite of either invalid or epicure. And the average individual, said Mrs. Ewing, might indulge occasionally with impunity in a broiled quail or a Boston stew, served on toast after this method, without the least fear of future regret or discomfort."

The dyspeptic should never eat raw fruit at the end of a meal. Between meals a little ripe fruit will do no harm.

Take nothing into the stomach at a meal that will lower its temperature, for this interferes with digestion and produces dyspepsia. Therefore take no ice-water, ices, or ice-cream.

If the dyspeptic be troubled with eructations of gas from the stomach, this may be corrected by eating only *vegetable* food at one meal and *animal* food at another. Taking both kinds at one meal will aggravate this trouble.

An interval of five hours should elapse between any two meals. It requires this length of time for the stomach to dispose of its contents after one meal, and to overtax it by forcing more food into it before it has had an interval of repose is a fruitful cause of indigestion.

Rest after a meal aids digestion. Those who are in good health should do no kind of mental or bodily labor immediately following a meal, and still less should a dyspeptic. It will aid recovery if the sufferer from dyspepsia will rest for one or two hours after a meal.

Many dyspeptics can entirely recover if they will observe the instructions already given, and confine themselves to a diet of dyspepsia-crackers, cod-fish and clabbered-milk, prepared according to the recipes which follow.

Recipe 21.

DYSPEPSIA-CRACKERS.

Take of *wheat-meal* one quart; butter, one tablespoonful; water, enough to make a *very stiff* dough. Beat this dough with a potato-masher or rolling-pin for half an hour, laying it on a bread-board for the purpose; roll it into a ball and beat it out over and over again. Now roll it out *very thin*, cut into round shapes, prick with a fork and bake in a quick oven.

The *wheat-meal* should be especially prepared for these crackers. If no other is to be had use *good brown flour*. But too often this is made up of poor flour, middlings and bran. To secure a *good* article, buy some good wheat, take it to the mill and have it ground. Let the *bran* be sifted out, but leave the middlings and flour together, and you have a good *wheat-meal*.

Recipe 22.

COD-FISH.

With a sharp knife cut *thin* pieces of the cod-fish cross-ways of the grain of the fibres; soak this over night to extract the salt; the next morning pour off the water in which it has soaked, put the fish into some fresh water and cook it for half an hour, then add a teacupful of milk and a tablespoonful of flour; just before dishing for the table beat up an egg and stir this in.

This is a very nutritious dish, and it is also very easy of digestion. Eaten with some of the dyspepsia-crackers, it makes as nice a meal as anyone need desire.

If milk should disagree, then it must be omitted and the cooking done with water only.

If the fish be soaked in *sour milk* instead of water the salt will be better extracted and the fish made fresher.

Recipe 23.

Clabbered-Milk.

This is simply *thick* sour milk. It is also called *loppered milk* and *bonny-clabber*.

Set a quantity of skimmed-milk away in a covered *glass* or *china* dish. When it *turns, i. e.*, becomes smooth, firm and jelly-like, it is ready to serve. Do not let it stand until the whey separates from the curd, or it will become acid and tough.

Set it on the ice for one hour before it is wanted for use. Serve from the dish in which it has turned. Cut out carefully with a large spoon, put in saucers and eat with cream and nutmeg.

This is one of the most wholesome of dishes, and those to whom it is new soon acquire a taste for, and grow fond of it.

Marion Harland, in her excellent book, "Common Sense in the Household," says of bonny-clabber:

"Few people know how delicious this healthful and cheap dessert can be made if eaten before it becomes tart and tough, with a liberal allowance of cream and sugar. There are not many jellies and creams superior to it."

To be relished the clabber must be *new* and *fresh*. If allowed to become stale and tough it will pall on the taste.

In health it may be eaten sweetened, but it *should not be eaten with sugar by dyspeptics*. Nutmeg must then be relied upon to give it flavor.

In case the clabbered-milk is not agreeable at first, begin with a small quantity—a tablespoonful at a time—and gradually a taste for this very useful food can be acquired. Some prefer taking it as a drink, beating it up until it becomes creamy.

Recipe 24.

SCHMIER-KASE.

This is made by tying clabbered-milk in a cloth to let the whey drain out. Hang it in a cool place over night. It may be eaten like the bonny-clabber. It is an excellent food for the dyspeptic, and may be taken in almost any quantity. It is light, nutritious, and easy of digestion. It is called by some cottage-cheese.

By observing the rules already laid down and adopting this dietary, many cases of dyspepsia may be cured. The greatest obstacle to a complete recovery seems to be that as improvement takes place and the appetite returns the patient is tempted to *over-eat*, and this being yielded to almost invariably causes a relapse. The "word to the wise" is not always sufficient, and each one must learn by sad experience. It is better to eat moderately until the stomach *fully* recovers its powers, than to transgress these rules and suffer a relapse.

The dietary already given should be adopted and strictly followed by all who suffer from dyspepsia in its worst forms. Those who suffer from the milder

forms of this disease should live on simple food. Dishes prepared according to the following recipes will be found to be well adapted to the wants of the dyspeptic, and also to afford ample variety.

White bread disagrees with many dyspeptics, and its use should be avoided. The following recipe makes an excellent article of brown bread.

Recipe 25.

BROWN BREAD.

Prepare a good sponge, as for white bread.

Put into the bread-pan two parts brown-flour (do not sift brown-flour), one-third white flour, and to every quart of this mixture allow a handful of Indian-meal, with a teaspoonful of salt.

Wet this with the sponge, and when it is mixed, add, for a loaf of fair size, half a teacupful of molasses. The dough should be *very* soft. If there be not enough sponge to reduce it to the desired consistency, add a little luke-warm water.

Knead this long and thoroughly, and set it to rise, which will require a longer time than for white bread. Give it plenty of time. Knead again, make into loaves and set for a second rising. When light bake steadily, giving it a longer time than white bread requires. Be careful that it does not burn. Do not cut while hot.

Recipe 26.

UNLEAVENED WAFERS.

Mix good, dry flour, with a little salt in it, to a stiff dough with milk. Roll out *thin*. Cut into round cakes, and roll these again almost as thin as letter paper. *Bake very quickly*. They may also be mixed with water.

These wafers are easily digested, very delicate and fill an important place in the dyspeptic's dietary. They can be used as crackers, eaten with soups and broths, and in a great variety of other ways.

Recipe 27.

UNFERMENTED BREAD.

Take one ounce of bicarbonate of soda (baking soda) and one quarter ounce of salt; mix with four pounds of flour. Mix this with a quart of cold water containing half a fluid-ounce of muriatic acid, and make a thin dough with as little kneading as possible; put it in the oven without delay. It requires a longer time for baking than it takes for fermented bread.

This is better for the dyspeptic than the ordinary fermented bread.

Some of the preparations of gluten, for which recipes are given in Chapter VIII., will be found to be good food for dyspeptics.

Many recoveries from dyspepsia have been known to follow the free use of *koumiss*, and I would recommend this in every case in which it is possible to give it a trial.

Besides the articles here mentioned, there are of course others which the dyspeptic can eat, but there is such a difference in their stomachs that no general list can be given which will apply to all cases, unless it be the simple dietary recommended at the opening of this Chapter, which will agree with all. If *complete recovery* be aimed at, it must be adopted and rigidly adhered to until a cure is effected. As the stomach becomes more tolerant the return to a mixed diet must be carefully made. Even after health is fully restored care in the selection of the food must be observed, for it must be

borne in mind that that which will once *produce* dyspepsia will also be the most efficient agent in bringing about a return of the same trouble, and probably the most important general rule yet laid down is: — Avoid everything which disagrees with *you*.

Aids to Digestion.

Recipe 28.

PEPSIN.

To prepare: "Take a *perfectly fresh* pig's-stomach. Carefully dissect the mucous membrane from the muscular coat, and place the membrane on a flat board. Clean off all remains of food and mucus with a sponge and a little water. With the back of a knife, or with an ivory paper-knife, scrape the surface very hard and squeeze out the contents of the glands. Spread the viscid mucus thus obtained on a piece of glass, so as to form a very thin layer, and dry it at a temperature of 100° over hot water, (or *in vacuo* over sulphuric acid). When dry scrape it from the glass, powder it, and keep in a well-stoppered bottle." — (*Beale.*)

This powder may be kept in a glass-stoppered bottle for years without losing any of its virtue. It is a valuable aid to digestion in dyspepsia.

When it is desired to use it to aid digestion, two or three grains may be taken just before a meal, or it may be taken with the food, sprinkling it on as you would salt, as it is tasteless and inodorous.

Or, it may be prepared in a *fluid* form, and a tablespoonful of this fluid mixed with any of the dishes of *animal* food recommended in this work.

Recipe 29.

DIGESTIVE FLUID.

Copy the following recipe and take it to your druggist:

℞

Pepsin
Acid mur. dil..... ää ℥ii
Glycerinae,
Aqua cinnamonii,.....ää ℥ii

M.

Take a teaspoonful in lime-water after each meal. This will be found to be a great aid to digestion.

Good preparations of pepsin can always be had at the druggists. It is a good plan to keep some on hand at all times, for in sickness it is a great aid to digestion. It should be used in the preparation of *animal* foods alone, as it is useless in the digestion of the starches.

Recipe 30.

MALT-INFUSION.

Crushed malt, – – – three ounces;
Cold water, – – – one-half pint.

Mix these in a vessel and allow it to remain for from twelve to fifteen hours. Then run it through filtering-paper until it becomes perfectly clear.

This is rich in diastase, and contains maltose in considerable quantities. It is liable to fermentation, and hence must be prepared fresh daily. It may be preserved, however, by adding a few drops of chloroform to the infusion, and keeping it in a bottle, well corked.

The malt-infusion is to be used to aid in the digestion of farinaceous (starchy) foods. It may be used by the dyspeptic, or may be added to the infant's food.

It is best taken mixed with the food. Add a tablespoonful to half a pint of gruel. It promotes the digestion of bread, oat-meal, sago, tapioca, rice, and articles of this class.

The preparations of extract of malt to be had of any druggist, may take the place of the above domestic preparation. These extracts contain in an easily digestible form many elements which go to make bone and muscle. They are especially valuable in those cases of indigestion in which the starchy foods are hard to dispose of, when the patient is troubled with eructations of gas and flatulent colic. It also aids in the digestion of fats, and may be taken when these disagree. This makes it especially useful, combined with cod-liver oil, in those diseases in which the latter is indicated.

CHAPTER VI.

Diet in Constipation.

The condition of the bowels is so directly dependent on the nature of one's food, that either an unnatural looseness, or a condition of costiveness, may be made to follow a radical change in the diet. So true is this that those who travel over the western prairies, living on crackers, beans, rice, coffee and large quantities of buffalo meat, will sometimes go for as great a period as two weeks without a passage of the bowels, while, on the other hand, we all know how frequently

a diarrhœa follows the use of green corn, squash, or other summer vegetables.

Putting, then, what we learn from these facts into practice, and the dietetic treatment of costiveness becomes a simple matter. The indications for treatment are to avoid eating much meat and dry food, but to drink freely of water and let the diet consist largely of coarse meals, succulent vegetables and juicy fruits.

Accordingly we may lay out the following dietary:

WHAT TO AVOID.

Tea,	Salt meats,	Biscuit,
Coffee,	Cheese,	Muffins,
Wine,	Beans,	Fresh bread,
Beer,	Cake,	Griddle-cakes.
Pork,	Pastry,	
Veal,	Pickles,	

WHAT TO EAT.

Mush,	Turnips,	Peaches,
Hominy,	Spinach,	Apples,
Oat-meal,	Cabbage,	Oranges,
Wheaten-grits,	Tomatoes,	Melons,
Corn-bread,	Asparagus,	Grapes,
Brown-bread,	Cauliflower,	Cherries,
Greens,	Figs,	Raspberries,
Cresses,	Pears,	Blackberries,
Squash,	Prunes,	Strawberries.

A *menu* somewhat after the following order may be adopted:—

Breakfast: Begin the meal by eating an orange; take a dish of oat-meal porridge, some brown bread, tomatoes, a goblet of milk with a pinch of salt in it.

The meal may be varied by adding occasionally some fried mush, farina or hominy, wheaten-grits, a mealy, baked potato, and in season substitute musk-melon, raspberries or strawberries for the orange. A little salt in milk is said to overcome the constipating effect which it is supposed to possess.

Dinner: Vegetable soup; a moderate quantity of beef or mutton; brown bread; such vegetables as squash, corn, tomatoes, asparagus and the like; for dessert, Indian pudding and peaches, melons, apples, grapes, or other fruits.

Supper: Cold meat; corn-meal mush with milk, brown bread; milk; baked apples or stewed prunes.

Wheaten-grits may be substituted for the mush. Graham crackers will make an excellent addition to this diet. Other fruits may be taken *ad libitum.*

Do not overload the stomach.

Drink as much soft water as you can dispose of.

It is a good plan to drink a goblet of oat-meal water every morning while dressing.

It is an error to suppose that a person is constipated unless there is a daily passage of the bowels, for one who has an evacuation regularly every forty-eight hours may consider himself in a condition of perfect health as regards this function.

The following drinks and dishes are all adapted to the relief of the condition under discussion.

Recipe 31.

OAT-MEAL WATER.

Oat-meal, - - - one tablespoonful;
Cold water, - - one gobletful.

Stir the oat-meal into the water and let it stand for about an hour. Strain through a sieve and drink cold.

This is a refreshing drink, and one adapted to those of costive habit.

Recipe 32.

TAMARIND WATER.

Tamarinds, – – one tablespoonful;
Ice-water, – – – one gobletful;
Sugar, – – – one teaspoonful.

Stir the tamarinds in the water until they are as nearly dissolved as possible; strain into a goblet and sweeten. Drink cold.

Recipe 33.

APPLE WATER.

Two large, juicy apples;
Boiling water, one quart.

Slice the apples into a pitcher and pour the boiling water over them. Cover close until cold, then strain and sweeten to taste.

This is an excellent drink for those who are inclined to constipation.

Recipe 34.

PORRIDGE.

Oat-meal, – – two tablespoonfuls;
Boiling water, – – one pint.

Mix the coarsely ground oat-meal with a small teacupful of cold water till it is of uniform consistence. Then pour onto this, in a sauce-pan, the boiling water and keep boiling and stirring for forty minutes. It is now fit to serve, but may be kept simmering till wanted if a little more water be added as the other steams away. Serve hot in a soup plate, and add cold milk to reduce it to a proper temperature.

Recipe 35.

BOILED MUSH.

Indian meal, - - -	one cupful;
Cold water, - - - -	two quarts.

Stir the Indian meal into the cold water, bring it to a boil for two hours, stirring often with a wooden spoon. Eat hot with milk.

Recipe 36.

OAT-MEAL GRUEL.

Boil two ounces of oat-meal for an hour in two quarts of water. Salt to taste.

Recipe 37.

OAT-MEAL PORRIDGE.

Put into a farina-kettle—*i. e.*, one kettle set within another—two quarts of boiling water, some salt, and six ounces of oat-meal. Keep the water in the outer kettle boiling for one hour. Keep the inner kettle covered, and do not stir the porridge until it is ready to serve. Eat hot, with milk or cream.

Recipe 38.

OAT-MEAL PUDDING.

Take some of the porridge made by the last recipe, add the yolks of some eggs, some sugar, salt and lemon and the whites of the eggs, well beaten. Bake for one hour. Serve with cream and sugar.

Recipe 39.

WHEATEN-GRITS.

Cracked wheat, - - -	one cupful;
Boiling water, - - -	one quart.

Soak the cracked wheat in a little cold water for one hour, stir this into the *boiling* water and boil for one hour, stirring often. Add a little salt.

This may be eaten with cream or milk, with either salt or sugar, some preferring one, some the other.

Recipe 40.

GRAHAM MUSH.

Graham flour, - - - one cup;
Boiling water, - - - - one quart.

Wet the flour with a little cold water and stir this into the boiling water, previously salted. Boil half an hour, stirring constantly.

Recipe 41.

HOMINY.

Hominy, - - - - one cupful;
Cold water, - - - three pints.

Put the hominy into the water, salt, bring it to a boil, and boil for one hour, stirring often. Eat with milk.

Recipe 42.

BREAD SAUCE.

Crumb up several slices of brown bread, cover with water; boil till smooth, pepper and salt to taste, stir in one-half the quantity of stewed tomatoes. This makes an excellent sauce to be eaten with meat.

Recipe 43.

BAKED APPLES.

Cut out the blossom end of the apples with a sharp pen-knife and pull out the stems; wash, and pack them in a pudding dish, putting a little sugar on top of each

apple. Pour a cupful of water in the bottom of the dish, and *cover the dish* containing the apples closely with another dish or pan; set in a moderate oven and let them steam until tender all through.

When done pour the liquor over while hot, and repeat this as they cool. Set on the ice several hours before tea. Transfer to a glass dish, pouring the juice over them again.

This is the only proper way to bake apples. They are more tender and better flavored than when baked in an open dish.

Besides these articles the *dyspepsia-crackers* (R. 20.), *brown bread* (R. 24.) and *unleavened-wafers* (R. 25.), recommended in the chapter of Dyspepsia, will make valuable additions to this dietary.

Stewed prunes, baked apples and other fruits should be freely indulged in, and may form part of each meal.

Rectal Alimentation.

In some diseases, when food cannot be taken by the mouth, it becomes necessary to resort to rectal alimentation. Life in this way may be supported for many weeks, no food whatever being taken into the stomach.

The most common conditions in which this becomes necessary are —

Ulcer of the stomach;

Stricture of the œsophagus;

Inflammation of the stomach;

Diphtheria, when the patient is no longer able to swallow;

Debility or exhaustion, the patient being too weak to take food;

Finally, any condition in which the stomach rejects all that is taken into it.

The following are the

RULES TO BE OBSERVED:

Preparatory to administering an enema, empty and wash the rectum by giving an injection of clean, warm water.

1. Force the enema in *slowly*.
2. Throw it as high up as possible.
3. Inject at intervals of two hours.
4. Inject no more than half a teacupful at a time.
5. Let the enema have a temperature of about that of the body—say 98° or 100° Fah.

Recipe 44.

MILK ENEMA.

Warm milk, with a little salt added, makes a simple and readily-absorbed enema. Heat the milk to the proper temperature, inject half a teacupful every two hours, and the patient is getting considerable nourishment.

Recipe 45.

BEEF-TEA ENEMA.

Beef-tea, - - -	one pint,
Raw beef, - - -	three ounces;
Dilute muriatic acid, -	twenty drops;
Pepsin, - - - -	two grains.

Take of beef-tea one pint. Take three ounces of raw beef, free from fat, scrape it with a spoon, and chop it until reduced to a *pulp;* stir this into the beef-tea, heated to the proper temperature, add the acid and pepsin, and it is ready to inject, according to the rules given.

Also, a simple enema of beef-tea is sometimes given, without the addition of scraped beef, but it is not so valuable an aliment as that prepared as in this recipe.

Recipe 46.

DEFIBRINATED BLOOD ENEMA.

Fresh blood is the most valuable of tissue foods, and, when from disease the system is no longer able to keep up its usual supply, we are but imitating nature when we introduce this pabulum into the shrunken veins. Blood may be looked upon as *meat in solution*, and in a far better state to be appropriated by the system than any that the arts of man can provide. The blood must necessarily be deprived of its fibrin, but so small a quantity of nitrogenous elements is lost by defibrinization, that its value as a nutrient is not materially lessened.

Defibrinated blood, then, is the most valuable nutrient enema that can be used to sustain patients demanding this kind of nourishment.

Go to the slaughter-house and take from the large pan the blood of a recently-killed beef. It must be taken *fresh*, as soon as it has flowed from the neck of the animal, and before it has had time to coagulate or form a clot. At this time, or even *while it is flowing*, it must be whipped with a bunch of straw or a handful of twigs, to remove the fibrin. Secure the *blood-serum* which remains in a wide-mouthed jar. When wanted for use this may be brought to the proper temperature by setting the jar in a vessel of warm water. Inject as you would milk or other enemata.

Recipe 47.

COD-LIVER OIL ENEMA.

Chop fine a half pound of fresh beef-pancreas, cover this with water and allow it to stand for an hour in a warm place. Strain through a cloth.

Mix an ounce of this pancreas-solution with a half ounce of cod-liver oil and use as an injection in those cases in which it is desired to supply the system with fat.

Cod-liver oil is a valuable injection in many wasting diseases, especially for young children. It should also be used as an inunction and rubbed into the skin, over the bowels of infants who can no longer take food by the stomach. In this manner considerable nourishment will be afforded.

CHAPTER VII.

Diet in Consumption.

The object to be aimed at in the dietetics of this disease is to give a *liberal* allowance of the most *nutritious* food that the patient is able to digest. If you can keep up *nutrition* you are doing much toward arresting the course of the disease.

The diet should consist chiefly of *animal* food, such as beef, mutton, chicken, and other fresh meats, milk, eggs, oysters and animal fats and oils, the object being to provide such food as will be most easily assimilated.

By this it is not meant, of course, that no vegetable food should be taken. Good, mealy potatoes, bread-pudding, plain preparations of rice, sago and tapioca, and all sound and fresh vegetables which are easily digested, may form part of the dietary. Use plenty of milk in the preparation of all dishes into which it can be made to enter.

The consumptive should avoid the use of salt-meats, fish, pork, rich gravies, pastry, and *everything which will disturb digestion.*

Above all must everything be avoided which will *loosen the bowels.*

Use no alcoholic stimulants whatever!

Alcohol is not only *useless* in this disease, but may do *positive harm.* On this subject Dr. Chambers says:

"As to the use of alcohol in threatened cases, and in the early stages of tubercle, I have no hesitation in pronouncing an opinion adverse to it."

When the disease is far-advanced and it is desired to stimulate the waning strength, there is less objection to its use.

Meats.

Beef. — The consumptive should take an abundance of *fresh meat.* Every morning for breakfast, if the appetite be strong enough, a tender beef-steak, rare-done, should be eaten. It should be broiled quickly on a grid-iron, over a clear, hot fire, or on the coals. Do not prick it with a fork, as it will let the juices escape. Dress with butter and season with salt and pepper. Serve hot.

At dinner take a liberal slice of rare roast-beef, together with some of the juice of the meat. Take also, if it does not disagree, a little of the suet cut from the hot roast.

Mutton is very digestible, and may be used to give variety to the meat diet. For breakfast a mutton-chop may occasionally be substituted for the beef-steak. The only proper way to cook the chop is to *broil* it.

Select a nice chop, sprinkle with salt and pepper, and place it on a grid-iron over a clear, hot fire for six or seven minutes, turning it occasionally to cook both sides equally. Do not prick it with the fork.

Chicken may be added for variety, but as a steady article of diet is not so well borne as beef.

Soups and meat-broths form a valuable addition to the consumptive's dietary.

Veal is, compared with other meats, indigestible, and should not be taken.

Raw meat is sometimes recommended for the consumptive, but really it possesses no virtue which does not belong to the rare-done beef in an equal degree. If taken, it should be minced very fine, seasoned with salt and pepper, and spread on a thin slice of bread.

Eggs.

Let eggs form a prominent part of the diet. An egg should never be cooked more than three minutes. They are best soft-boiled or soft-poached. If the eggs be *hard-boiled* the white, which is less digestible than the yolk, should be removed, and the yolk alone mashed up with a little butter and salt, and eaten with toast, or an unleavened wafer (R. 14.) This is very palatable and nutritious.

Milk.

Milk may be used by the consumptive in unlimited quantities, if there be no idiosyncrasy which prevents. It fulfils all the indications of a nutritious and easily assimilable food, so important in this disease. It

should be used in the preparation of as many dishes as it can properly enter into. Let the patient take occasionally a tumbler of milk with an egg beaten up in it. Some like it warm from the cow, and if the patient does the milking, so much the better.

Clabbered-milk, as is already prescribed for the dyspeptic, is also an excellent food for the consumptive, and it cannot be too highly commended. It contains all the elements of fresh milk in a form requiring less effort on the part of the system to assimilate them, thus making it both very nutritious and digestible. The patient should learn to use this, and let it form a prominent part of the dietary. It makes a nice dessert, and may be used in this way, or it may form the principal part of the meal at breakfast or tea. With cream and sugar, and fresh unleavened wafers a nice meal can be made.

Cottage-cheese is another agreeable food of this same class, and for variety may sometimes be used. Buttermilk, also, should be freely indulged in.

Koumiss.

Another form of milk, the use of which has been attended by great benefit in many cases of consumption, is koumiss, or Arabian milk wine. It is said to have been thus used by the Arabs for many centuries, and is now very extensively used by the tribes living on the steppes of Russia, and it is only comparatively recently that it has been known to the civilized world, having been introduced by Dr. Jarotzki, a Russian physician. The Arabs make it of mare's milk, but an excellent article can be made from the milk of the cow. It contains some alcohol, and is contraindicated in those cases in which the latter should not be used.

There are many different methods of making koumiss, almost as many as there are people who make it. No better article, however, can be made than that supplied by the following

Recipe 48.

Champagne bottles - - six one-quart;
Compressed yeast - one square cake;
Granulated sugar six even tablespoonfuls;
Fresh milk - - - - one gallon.

The bottles must be warm, and *perfectly clean*. Put into each bottle—

Yeast - - - one-sixth of a cake;
Sugar - - - one tablespoonful;
Hot water - - two tablespoonfuls.

Shake the bottle till the yeast is dissolved, then add 1½ pints of *warm* milk. Stir the milk constantly while it is being brought to blood-heat, so that it may be evenly warmed throughout.

Cork the bottles *very* tightly, and tie or wire the corks. Shake the bottles well, and lay them on their sides, keeping them at a temperature of not less than 75° or 80° F. Leave them four or five days, turning them over gently once each day.

When the milk looks thick and smooth, like bonny-clabber, the bottles should be put on ice and left twenty-four hours. This stops further fermentation.

Only the stoutest bottles should be used—ordinary ones are apt to burst. Care must be taken in opening a bottle of Koumiss, as it is highly effervescent. It is best to use a champagne tap.

When wanted for use, shake the bottle before drawing the Koumiss.

If these instructions are observed, success is certain. Failure will follow only from a want of the proper regulation of the temperature, either of the milk, when warming it, or of the place where the bottles are kept while fermentation is going on.

The process is simple and it makes a most delicious and refreshing drink.

As already said, the use of koumiss has been followed by great benefit in many cases of consumption. A bottleful a day may be taken, in addition to the ordinary diet. Drink a glassful before each meal.

Cod-liver Oil.

Of all articles used in the treatment of consumption, cod-liver oil remains the most important. The giving of the oil is not merely to supply fat, but its action is to *improve nutrition*, since fat is the basis of all molecular, or cell-growth.

Dr. Chambers says: "Cod-liver oil is a typical aliment, representing what is the fittest of all known substances to supply the deficiency that constitutes the disease....Oleaginous substance is what is furnished by nature for the primary growth and nutrition of all the higher tissues of animal bodies; so that in administering it we are wisely imitating the wisest teacher of medicine, mother Nature."

Instructions regarding the choice and mode of administration of the oil will be useful here.

The oil should be as *fresh* as possible.

It should have no color, but be *pale* and *clear*.

The brown-colored oils are impure, and made from livers that have partially decomposed.

The oil should be kept *well corked*, and in a *cool place*.

If exposed to the air the oil becomes strong and rancid—keep well corked and do not open oftener than necessary.

There are many preparations of cod-liver oil in emulsion—combined with malt, with pancreatin, hypophosphites, and other articles. These are all useful, and are to be recommended in different cases.

A dose of a teaspoonful is sufficient to begin with. Increase this quantity gradually until a tablespoonful is taken three times a day.

Do not take it on an empty stomach—it will cause disagreeable eructations.

The best time to take the oil is about *half an hour after a meal*. If taken at this time the oil has but a short time to remain in the stomach, as the already partially-digested meal is fast passing into the intestines.

While taking the oil avoid the use of all pastry, pork, fat meat, rich dressings and the like. There seems to be less danger of disturbing digestion if all other fats and oils be avoided while taking this one.

To some the taste of the oil is very disagreeable and they find it difficult to take, while others meet with no difficulty whatever. But even in the latter class its long-continued use will cause it to pall on the taste, so it is best to disguise it as much as possible. There are various ways of accomplishing this; what will suit one may not suit another.

Before taking the oil chew something of a sharp nature, to engage the nerves of taste. For this purpose chew a clove, a peppermint lonzenge, or take a pinch of salt.

The spoon should be introduced well into the mouth, the oil deposited well back on the tongue and taken down at *one swallow*.

After swallowing the oil the taste which remains in the mouth may be removed by drinking some well-sweetened coffee, or by immediately eating a fresh cracker.

The use of the oil should be persisted in for months and years.

Malt Extract.

This offers a useful food for the consumptive, as it assists in the digestion of the starches and fats, and hence, combined with cod-liver oil, the latter can often be taken and disposed of by the system when in its pure state it would disagree. The same can be said for cod-liver oil in emulsion with maltine and pancreatin.

Hypophosphites.

The hypophosphites of lime and soda, as introduced by Dr. Churchill, of Paris, are beneficial in many cases. It will not do to substitute the hypophosphites for the oil, but some patients who have been taking the latter for a long time cease to make further improvement; in such cases the hypophosphites may be given together with the oil, and improvement will go on.

The hypophosphites in solution are kept by all druggists. Ask for the *syrup of hypophosphites of lime and soda*.

CHAPTER VIII.

Diet in Diabetes.

Diabetes is marked by the appearance of sugar in the urine. The dietetic treatment is based on the fact that sugar and starch (which latter in the system is converted into sugar), when taken into the system, cause an increase in the amount of sugar passed off in the urine, and aggravate the disease. The indication then is to *supply a diet containing neither sugar nor starch.*

The following tables will aid in the selection of a dietary for the diabetic:

VEGETABLE FOOD PROHIBITED:

Arrow-root,	Carrots,	Sago,
Asparagus,	Maccaroni,	Sugar,
Bread,	Oat-meal,	Turnips,
Biscuit,	Pastry,	Tapioca,
Beans,	Potatoes,	Vermicella.
Beets,	Peas,	
Crackers,	Rice,	

FRUITS PROHIBITED:

Apples,	Peaches,	Blackberries,
Grapes,	Plums,	and
Pears,	Pineapples,	Other sweet fruits.
Bananas,	Raspberries,	

Beverages Prohibited:

All *alcoholic* drinks, as wine, beer, brandy, ale, cider, etc.

All sweet drinks — *i. e.*, those containing any form of sugar.

Honey may be mentioned in this connection.

Vegetable Food Allowable:

Artichokes,	Cucumbers,	Lettuce,
Cabbage,	French-beans,	Pickles,
Celery,	Olives,	Spinach,
Cresses,	Greens,	Mushrooms.

Fruits Allowable:

Lemons,	Gooseberries,
Cherries,	Strawberries,
Currants,	Acid fruits generally.

Animal Food Allowable:

All meats, poultry, game, fish, oysters, cheese, milk, and eggs may be freely indulged in.

Liver alone, on theoretical grounds, is prohibited.

Dishes That May Be Taken:

All preparations of gluten;

Oysters, stewed, or fried with gluten or bran-flour;

Jellies, if there be no sugar in them;

Lettuce, with hard-boiled eggs and salad-dressing;

Soups of various kinds, if they contain no flour;

Tea and coffee should not be sweetened with sugar; glycerine may be substituted, *if agreeable.*

It is better to put cream into tea and coffee instead of milk.

Custards and puddings should be sweetened with glycerine.

If the diabetic be compelled to take ordinary bread, it should be cut thin and well toasted.

In changing the diet, observe the following

RULES:

1. Do not adopt a rigid diet too abruptly.
2. First reduce the supply of bread and increase at the same time the supply of meat.
3. Next substitute brown-bread for wheaten-bread.
4. Then some bran-bread or gluten-bread may be substituted for the wheaten-bread.
5. Now gradually come to a diet regulated according to the tables already given.

The diabetic patient should

Chew slowly and eat moderately;
Drink as much water as the thirst demands;
Wear warm flannels next the skin;
Take a great deal of open-air exercise.

Of all articles of food of which the diabetic is deprived it seems to be harder for him to deny himself bread than any other one. For this reason physicians have taxed their ingenuity to provide a substitute which shall be free from starch. One of the earliest substitutes devised was bran-bread. But few will care to go to the trouble of preparing this when gluten-flour can be obtained, and besides it is deficient in nutritive value.

Gluten Flour.

Fortunately we have in gluten flour a substitute for ordinary wheat flour which makes an excellent article of bread that can be freely eaten by the diabetic. It is agreeable to the palate, very nutritious, and almost

entirely free from the starchy elements, so injurious in this disease. The amount of starch which it contains is so small that it need not be taken into account. Gluten flour is made from that part of the grain of wheat which underlies the bran-scales and surrounds the starch-area. It is now manufactured in various parts of the country. It can be made up into a great variety of agreeable dishes, and the following recipes will enable the diabetic to provide himself with a diet as liberal as those enjoy who are under no restrictions in this respect.

Recipe 49.

GLUTEN BREAD.

Milk, - - - - one pint;
Warm water, - - one pint;
Butter, - - - one heaping teaspoonful;
Yeast, - - - one-half cake;
Two eggs.

Mix the milk and water; soak the yeast-cake in a little warm water, beat the eggs well and add these to the milk and water; stir in gluten flour until a soft dough is made, work in the butter, kneading as you would ordinary bread-dough. Mould, put in pans to rise, and when light bake in a hot oven.

Gluten bread requires less yeast than ordinary bread, and less time in rising. The dough should be made softer than for white-flour bread.

Recipe 50.

GLUTEN GEMS

One egg;
One pint water;
One tablespoonful butter;
One tablespoonful baking powder;
Gluten flour to make a thin dough.

Beat the egg up, add it to the water, put in a little salt; mix the baking powder with the dry flour, then stir this into the water to make a thin dough, and stir in the butter. Bake in hot, well-buttered gem-pans in a quick oven. These take a longer time to bake than other gems require.

Recipe 51.

GLUTEN MUSH.

Stir the gluten into *boiling* water to make a thick mush. Cover the vessel containing the mush, set it in another vessel of boiling water, and keep the water in the outer vessel at a boil for half an hour or longer. If there are any lumps, stir in a little boiling water and they will break down. Eat with cream.

Recipe 52.

FRIED MUSH.

Stir one pound of gluten flour into a quart of boiling water, add a little salt and boil for ten minutes; pour into a shallow dish and allow it to cool. The next morning cut into slices and fry. Eat with butter.

This is a very nice dish for breakfast.

Recipe 53.

GLUTEN CAKES.

One cupful gluten;
Two tablespoonfuls butter;
Three tablespoonfuls grated cheese;
Two tablespoonfuls cream;
Yolks of two eggs;
One-half teaspoonful salt;
A little nutmeg.

Mix all of these ingredients thoroughly together in a dish; roll out thin the dough thus made; bake in a quick oven.

This is a very agreeable cake and helps greatly to give variety to the diabetic's diet.

Recipe 54.

GLUTEN PUDDING.

Soak two thick slices of gluten bread, broken up, in half a pint of milk; add one beaten egg; sweeten with glycerine and bake in a small basin.

This makes a tolerably good pudding for the diabetic—enough for one person.

Recipe 55.

GLUTEN WAFERS.

Stir some gluten flour, with a little salt, into cream to make a dough which can be rolled out *very thin*. Cut into forms and bake in a quick oven.

Gluten flour can also be used for making gruels, for thickening soups and gravies, and in frying oysters.

Recipe 56.

BRAN WATER.

Wheat bran, - - -	two quarts;
Cold water, - - - -	three quarts.

Mix the two in a large dish, and let the bran soak over night. The next morning rub and squeeze the bran with the hands until all the meal which adheres to it is washed off; strain through a fine sieve, pressing and squeezing until the bran is almost dry.

This makes a nutritious and pleasant drink for the diabetic, and, as it contains no starch, it can be taken with impunity.

Milk Cure.

Cures of diabetes have been effected by an exclusive milk diet, as recommended by Dr. Donkin. This is well worth a trial, especially in recent cases.

In order to obtain the full benefit of this treatment, the patient must adopt and rigidly adhere to the following

RULES:

Use *fresh* milk.

Carefully remove all cream.

The milk may be taken cold or warm, but it *must not be boiled* in the warming.

The first day take from *four to six pints.* (This would be from two to three glassfuls of milk taken every two hours during the day).

It is better to divide the day into equal periods and take frequent draughts—even though a glassful be taken every hour—than it is to take a large quantity on the stomach at once.

Now the quantity of milk taken may be increased from day to day, until five or six quarts are taken daily.

This quantity, six quarts, need not be exceeded.

Nothing else must be taken while the milk diet is used.

If at the end of a week there is no improvement, the treatment may be abandoned.

If the treatment be of benefit, it will be denoted by a diminished amount of urine, less sugar, and improvement in the general health.

This treatment should be continued from three to six weeks after all sugar has disappeared from the urine.

The return to a diet of *solid* food must be *gradual*, and upon the *care* taken in this, much of the success of the treatment will depend.

Milk should still be taken, but other articles gradually added, and meats, beef-tea, broths, and the class of vegetables recommended as allowable, may now form part of the dietary.

The success of this treatment consists in rigidly carrying out the strict *rules which have been laid down*, and above all *care in returning to a mixed diet.*

For variety, clabbered milk may be taken along with the sweet-milk diet.

By following the instructions given in this chapter, any person suffering from diabetes may live to enjoy a fair degree of health for many years, and permanent cures have sometimes followed the dietetic treatment, especially the *milk diet*, which, of all methods of treatment for diabetes, is by far the most important, and that which has been followed by the most striking beneficial results.

Diet in Bright's Disease.

In this disease "the object aimed at by the dietician should be to supply the nutritient organs with aliment which is the most readily and rapidly convertible into blood and tissue, namely, digestible animal food in frequent, moderate quantities."—(*Chambers.*)

According to this, then, the diet should consist largely of dishes composed of milk, soft eggs, oysters, mutton, rare-beef, chicken, game, and the like.

Some physicians advise the observance of a diet composed chiefly of vegetables, on the supposition

that a meat diet throws extra work upon the kidneys in compelling them to remove from the blood an excess of urea, from the waste of azotized material. Hence the diet should be chiefly composed of vegetables, and bread in all forms; potatoes, rice, hominy, maccaroni, peas, beans and other vegetable food, should make up the principal part of the diet, while comparatively little meat should be taken. If the patient does not do well under the meat diet first recommended, then this may be tried, but the greatest benefit will probably follow the use of the

Milk Diet.

"In a series of cases which have been described by Dr. Schmidt, in his inaugural thesis, I have obtained most brilliant results where all other treatment had failed, by putting the patients on an almost exclusive diet of milk."—(*Niemeyer.*)

Having tested this plan of treatment in my own practice, I am prepared to recommend it to others.

The patient should gradually leave off all his ordinary mixed diet, until he reaches an exclusively *milk diet.* Begin by drinking a quart of milk a day, and increase the quantity from day to day until finally five or six quarts of milk daily are taken. The day may be divided into equal periods and half a pint or a pint taken at a time. This treatment should be kept up for at least a month. By that time considerable improvement will have been made, and the after-treatment may be regulated by the varying conditions of the case.

The instructions given for the milk diet in diabetes, may be applied here.

The subject of Bright's disease should make it a point to *drink large quantities of soft water*. This helps to "wash out from the blood," so to speak, the impurities with which it becomes loaded.

In disease of the kidneys *alcohol* essentially acts the part of a *poison*, and must not be taken in any form or quantity whatever. Therefore drink no spirituous or malt liquors.

Diet in Gravel.

Those who are subject to stone in the bladder, and gravel may do much towards a cure by adopting a systematic dietary.

The object should be to take a large proportion of vegetable food, and but little meat.

Eat no more meat than once a day.

Avoid especially rich sauces, cheese, rich soups, sugar, fats, cream, and everything that will disturb digestion.

Take no spirituous or malt liquors of any kind.

If the attacks of gravel are frequent, come to a *strictly vegetable diet*, eating *no meat whatever*.

Drink no "hard" water, or water impregnated with lime. Drinking *freely* of "soft" water, rain-water, or that which has been freed from mineral substances, is very beneficial, and the more "soft" water the patient drinks, the better.

A strict observance of these rules will do much towards promoting a cure.

CHAPTER IX.

Diet for Travelers.

Many of the disorders of digestion with which those who are "on the road" a great deal are troubled, may be avoided by giving due attention to the nature of the food which they take, and by observing a few simple rules in the regulation of their diet.

As a rule, much of the trouble arises from taking too much meat and not enough vegetables. Dishes of meats and eggs are more quickly prepared than are vegetables, and there is great temptation to rely upon the former almost to the exclusion of the more succulent food.

Again, there is a disposition on the part of some to eat too heartily, more than the appetite demands, and more than they would if at home. It will be found that if a *light* diet only be indulged in it will not be followed by the headaches, constipation and digestive disorders that attend immoderate eating.

The *hasty* swallowing of meals at railroad eating-houses is another prolific source of indigestion on the part of travelers, and the dining-cars now to be found on all first-class roads are an inestimable blessing to the traveling public. If you are *compelled* to eat at a station, take but a *light* meal and eat *slowly* and *deliberately*. "Twenty minutes for refreshments" afford ample time to dispose of a full meal. If you take pains to observe, you will find that you spend no

greater time than this at the table, when at home, with nothing to hurry you.

The traveler who suffers from constipation should refrain from eating great quantities of meat and white bread and rolls, and should partake largely of succulent vegetables and fruits. Cabbage, potatoes, turnips, cauliflower, tomatoes, squash, beets, onions, corn and peas should be freely indulged in, and brown-bread and corn-bread in preference to white-bread.

All kinds of ripe fruits, apples, peaches, pears, grapes, bananas, strawberries, raspberries, blackberries, oranges, and the many others to be found in our markets, should be freely eaten.

Veal and chicken will be found to be less binding to the bowels than pork, beef and cured meats.

Nuts, confections, cakes and pastries should be avoided.

The drinking of so much tea and coffee at hotels and railroad eating-houses is another cause of indigestion. Drinking much tea, especially produces indigestion and constipation.

When possible, drink *milk* instead of tea or coffee. A pinch of salt in each glass of milk is said to overcome its constipating effects. Butter-milk, when it is to be had, makes an excellent and wholesome drink.

Some of the ailments from which travelers suffer are due to the water which they are compelled to drink. These may be avoided in a great measure by drinking no water which has not been boiled and then filtered. A pocket-filter may be carried for the latter purpose.

In some parts of the country the dishes will all contain too much *grease*, causing acidity, a nauseous taste in the mouth, flatulence or diarrhœa. The best

way to correct this is to take some vinegar or lemon-juice on the plate, and eat these with as many dishes as possible.

In hot weather the appetite for breakfast of those who travel is often impaired by passing a restless, sleepless night. This may be remedied by wringing a sheet or some towels out of cold water and spreading them on the floor, or hanging them where the breeze from an open window will blow over them. This will cool and moisten the atmosphere.

If, while traveling, you are taken with diarrhœa keep perfectly at rest on the back, and suck a lemon, and you will soon be over it.

A careful study of Chapter V., Diet in Dyspepsia, and Chapter VI., Diet in Constipation, and an observance of the instructions there given will be of great aid to those who suffer from the disturbances to which traveling-men are especially liable.

Diet in Sea-Sickness.

Really the only certain way to avoid this *bete noir* of ocean travel, is to take the old Captain's advice and "never go to sea." But if once you are called upon to pay tribute to Neptune, there is nothing for it but to endure with the best possible grace.

There is usually almost complete loss of appetite, and really but little food of any kind is required.

It is a good plan to have the steward bring a bowl of gruel or porridge to your berth every morning. After taking this, lie quietly for several hours and you are pretty well fortified for the trials of the day.

Lemons possess no especial virtue in relieving the sickness, but they are very grateful to the sufferer in removing from the mouth that foul taste which is an inevitable accompaniment, and for this purpose all who are about to start on a voyage are advised to provide themselves with a supply, if they are not to be had on board.

Lemon-drops, to be had at the confectioners, make an excellent substitute, and I would advise all who are about to make a sea-voyage to provide themselves with a pound of lemon-candy, or "acid-drops." They are really better than the lemons for the purpose indicated.

While the sickness continues little else than the porridge or gruel, with perhaps some tea and toast, can be taken. As the appetite returns something more is called for, and yet the stomach will not permit its owner to go to the saloon, much less to indulge in the rich fare with which the table is generally laden. At such times I found it a good plan to remain in my stateroom, or on deck, and before meal-time get the steward to give me a sight of the bill-o'-fare. From this I could generally select some plain-cooked vegetables, oysters (when in season), sago, or rice-pudding, or other dish which my feelings would at once tell me could be relished.

Besides these attentions to diet the sufferer should remain in the fresh air as much as possible, and also *avoid the upright position.* If the weather permit, spread your steamer-rug on the deck and lie upon that; if compelled to be below, *maintain the recumbent posture.*

It is said that those whose stomach and bowels are in best condition when they go aboard, seem to suffer

least. But I could not discover that this had anything to do with it.

It is poor comfort, while one is suffering all the agonies of the *mal de mer*, to be told by some wise individual who has crossed before, "don't you know," that you will feel better when you get over it. Ask your *comforter* if he intends his remark to be taken in a Pickwickian sense.

Sea-sickness is usually a harmless complaint, from which there is soon complete recovery, about three days being its average duration. But in rare instances it is so long continued that the victim suffers in his general health from want of nourishment, since no food whatever can be taken into the stomach, and sometimes even life is endangered. In such cases nutrition should be kept up by nutrient enemata.

CHAPTER X.

Diet for the Corpulent.

Those who are unusually corpulent may reduce their weight many pounds by observing a strict regimen in diet, and by taking proper exercise.

The rule should be to take with the food *no fat or sugar*, and as little of the starchy foods as it is possible to get along with.

Accordingly, the following dietary may be presented.

WHAT SHOULD BE AVOIDED:

Fats,	Bread,	Soups,
Milk,	Biscuit,	Sago,
Cream,	Crackers,	Tapioca,
Butter,	Pastries,	Beets,
Pork,	Pies,	Potatoes,
Sugar,	Puddings,	Arrowroot,
Cake,	Rice,	Corn-starch,
Candies,	Gruels,	Sweet potatoes.

No *sweet* fruits should be taken.

Put no cream or sugar into tea or coffee.

It is best to avoid the use of milk altogether; let water be the only drink.

Alcohol, in spirituous or malt liquors, must not be taken.

WHAT MAY BE EATEN:

Fish,	Cresses,	Oysters,
Beef,	Cabbage,	Spinach,
Veal,	Tomatoes,	Lettuce,
Mutton,	Pigs-feet,	Radish,
Tongue,	Turkey,	Greens,
Celery,	Chicken,	Squash.
Onions,	Game,	

Other vegetables, containing little or no starch;

Sour fruits, as cranberries, lemons, sour apples, and the like.

Besides adopting this dietary, the object may be promoted by observing certain other rules, the most important of which are the following:

Do not spend too much time in sleep. Eight hours should be the utmost limit—seven hours are better.

Take a cool sponge-bath every morning, and, if possible, take one or two Turkish baths a week.

Take a run in the open air, two or three times daily, until perspiration is induced.

According to these rules, the following daily regimen may be observed:

Rise at seven o'clock, take a cool sponge-bath and rub the body with a coarse towel or flesh-brush.

If possible take a short, brisk run in the open air.

Breakfast at eight on *lean* meat, being careful to avoid all fat. Eat also dry toast, any vegetables in the list, and tea or coffee without cream or sugar.

Dinner at twelve: Eat plain meat (avoiding fat), fresh vegetables, as tomatoes, cabbage, cresses, celery, onions, and others in the list. Take no potatoes or sweet dishes. Dessert may consist of a tart jelly, baked apple, lemon-ice, or the like. Do not take soups or pastry.

Tea should consist of lean meat, apple sauce, a little toast and tea.

Eat moderately, and if this regimen be carried out, *keeping up the exercise*, it cannot fail of having the desired effect.

After continuing this for two or three weeks the measures need not be so strictly carried out, but still no *sugar* or *fat* should be taken in the food. Sugar is the most active of all as a fat-forming food.

Take the weight of the body every few days, and *do not let the reduction in weight go on at a greater rate than half-a-pound a day.*

Diet in Scrofula.

While scrofula is often of hereditary origin, yet it may be acquired. Prominent among its causes are, an absence of sunlight, breathing a vitiated atmosphere, and living on insufficient, unwholesome food. Hence, while the matter of general hygiene should not be neglected, the regulation of the diet must receive due attention. Give to scrofulous subjects an ample supply of the most nutritious foods. Let the child have a greater amount of animal food than those children receive who suffer from no taint of this kind. Of all foods of this character, cod-liver oil is probably the most important.

If a mother be scrofulous she should not nurse her babe, but put it immediately to a healthy wet-nurse. If, on the other hand, the child inherit scrofula from the father, and the mother be free from any such taint, she may nurse her babe. During lactation, however, she should take three times a day a teaspoonful of the hypophosphites of lime and soda. If the child be put to a wet-nurse the latter should likewise take the hypophosphites.

Too early weaning should be carefully guarded against.

After weaning, the child should receive an unusually large proportion of animal food. It should have a bountiful supply of milk, adding to each glassful a tablespoonful of lime-water.

Give to the child a piece of meat about the size of your finger, cut lengthwise of the fibre, from the *rare* part of the beef-roast or beef-steak. Let it have this to chew.

Take a small piece of beef, broil it very quickly on hot coals. Do not cook it too much, but let the inside

be *red* and *juicy*. Mince this very fine with a chopping knife, spread it on a thin slice of bread which has been lightly buttered, sprinkle with fine salt, and give to the child to eat.

This is more palatable than the raw meat usually recommended in these cases, and there is not so much danger of the child's becoming afflicted with worms as there is when the meat is taken without cooking.

If the scrofula be already established when the child comes under treatment, cod-liver oil should form a prominent part of its diet. Give a teaspoonful three times a day. *This is a most important remedy in these cases.* Give the oil by inunction if there should be difficulty in getting the child to take it by the mouth.

A scrofulous child should enjoy *an abundance of fresh air and sunshine.*

Diet in Rickets.

The condition known as *rickets* is caused by faulty nutrition, and a proper regulation of the diet, supplying those elements in which the system is deficient, will correct the tendency, and restore the child to a state of health, in almost every case.

Too early weaning often causes rickets in otherwise healthy children. Bottle-fed children also sometimes fall victims to the disease when those who have care of them are ignorant of the proper nature of the food which they should receive. An otherwise healthy child will grow rickety if kept upon a diet consisting of *starchy* food.

A rickety child should receive a generous meat diet, as in scrofula. Give it raw beef, finely minced and spread on bread. Let it have plenty of milk, with

lime-water added. Extract of malt, containing, as it does, phosphates of lime and other salts, is among the most important foods which the child can receive, and its use should not be neglected in any case.

Preparations of malt, containing, as they do, phosphate of lime, are very valuable in the treatment of rickets. If not given in this form, some pure phosphate of lime should be put into the milk which the child drinks.

Cod-liver oil may be given in small quantities, beginning with doses of ten drops, and gradually increasing the amount until the child takes a teaspoonful two or three times a day. This is a highly important part of the treatment. If this course be pursued, giving the child meats, milk, lime-water, extract of malt, and cod-liver oil, in addition to its other diet, and the matter of general hygiene receive due attention, recovery will follow in almost every case.

Diet in Scurvy.

Of all diseases in the catalogue this is pre-eminently the one which is most amenable to dietetic treatment. Since it is produced by a lack of vegetable food, the treatment suggests itself:—Supply the system with that of which it has been deprived.

Hence all that is necessary to cure a scorbutic patient is to supply him with a *vegetable diet.*

Half a pound of potatoes a day will prevent scurvy. Give to the patient tomatoes, saur-kraut, onions, greens, cabbage, spinach, and other vegetables, and especially *limes* or *lemons.*

The citrates, tartrates, malates and lactates of potash should be used as drinks.

"*Land scurvy*," or *purpura*, may be treated in a similar manner as regards dietetics.

Diet in Chlorosis—Green-Sickness.

In this disease the food should be of such a character that it can be readily converted into blood, of which the system is deficient. Hence juicy beef should form a prominent part of the diet, and the patient should take as much as she can with comfort; more, even, than the immediate wants of the system demand. Fresh milk should be taken in abundance.

Besides these, other nutritious animal foods should form a prominent part of the dietary, and oysters in all forms, codfish, soups and broths, should be freely taken.

Diet in Collapse.

In the collapse following wounds, and the collapse of "shock," extract of meat and wine, equal parts, is the best stimulant that can be given, and its use has saved many lives. It was used with great success in the Austrian army in 1859, and in the American armies during the late war.

Extract of Meat.

"Cut the lean of fresh-killed meat very small, put it into eight times its weight of cold water, and heat it gradually to the boiling point. When it has boiled for a few minutes, strain it through a cloth, and evaporate the liquor gently by water-bath to a soft mass. Two pounds of meat yield one ounce of extract. Fat must be carefully excluded or it will not keep."—(*Liebig.*)

"Equal parts of this extract and good sherry wine should be freely administered."—(*Ruddock.*)

Recipe 57.

HOT MILK AND WATER.

Fresh milk, - - - one-half pint;
Boiling water, - - - one-half pint.

Pour the water into the milk, and give immediately.

This is very quickly absorbed; it soon enters the circulation, and increases the volume of blood, and is an excellent restorative after hæmorrhage or fainting. It has the advantage of being very quickly prepared.

CHAPTER XI.

Diet in Rheumatism.

Give no meat whatever to a patient with rheumatic fever; it will invariably aggravate the disease.

If meat in any form be taken in rheumatism it seems to turn to acid, and as this is already in excess in the system, the meat will only aggravate the disease.

The patient *must* live on *vegetable food* until health is fully restored, however hard it may be for him to be deprived of his accustomed diet.

Even after apparent recovery the return to a meat diet must be made very cautiously and gradually, for if adopted too early it will sometimes bring on a relapse.

The patient suffering from rheumatism must, therefore, have a purely vegetable diet, consisting of such articles as gruels, boiled rice, preparations of sago, tapioca, farina, corn starch, panada and other preparations of bread, mashed potatoes and the like.

The patient should receive no beer, ale or other malt liquors, or alcohol in any shape, as these will invariably aggravate, and must in all cases be *strictly prohibited.* No *acid* drinks should be taken, and *sweets* should be carefully avoided.

Recipe 58.

ALKALINE DRINK.

Peel of one lemon;
Tablespoonful of sugar;
Half a pint of pure water;
Half a pint of Vichy water.

Slice the lemon-peel *very thin* and put it into a pitcher with the sugar; pour on enough hot water to dissolve the sugar; add the other water. This makes a pleasant alkaline drink for use in rheumatism.

Diet in Chronic Rheumatism.

"The *rheumatics* seldom need lay a patient up if he will adopt the simple dietetic expedient of eating a certain quantity of fresh mustard with every meal, much if he is worse than usual, a little if he is pretty comfortable."— (*Chambers.*)

Recipe 59.

CELERY-TOAST.

Cut up some sticks of celery and boil in a little water until tender; add some milk, stew for a while,

salt and pepper to taste, thicken slightly with flour, pour this over some soft toast, and eat as you would asparagus.

It is claimed by many that cooked celery is of benefit in chronic rheumatism, and there is sufficient testimony to this effect to make it worth a trial. I offer it on the authority of a writer in the *Medical Record*, having had no experience with it myself.

Diet in Asthma.

Asthmatics are generally dyspeptics, and for such cases more is to be done on the side of the stomach than in any other direction.

The following plan of dietary has proved to be of great benefit in the treatment of this disease. It was first employed by a prominent English physician.

First by proper treatment get the bowels to acting regularly.

"After having attended to the general secretions for about ten days, the strict dietetic treatment is to be begun.

"The diet is to be regularly weighed out, and adhered to with the greatest strictness, the hours of meals being most rigidly fixed as follows:

"*Breakfast* at *eight* A. M., to consist of half a pint of tea or coffee, with a little cream, and two ounces of dry stale bread.

"*Dinner* at *one* P. M., to consist of two ounces of fresh beef or mutton, without fat or skin, and two ounces of dry stale bread or well-boiled rice; three hours *after* dinner (not sooner), satisfy the thirst with as much milk, toast-water, *koumiss*, or other beverage, as is desired.

"*Supper* at *seven* P. M., to consist of two ounces of meat as before, with two ounces of dry stale bread.

"The patient is not allowed to drink any fluid whatever within one hour *before* his dinner or supper, and not within three hours *after* either of these meals. At other times he is not limited as to drinks, except that the use of all malt liquors is to be prohibited. *Soda* or *seltzer*-water may be indulged in at other times when thirsty."

Dr. Pridham says of this method:

"Under this treatment in a few days the distressing symptoms may be expected to subside, and after the regimen has been strictly persevered in for at least a month, two ounces more of meat may be permitted if digestion is found to be sufficient. The stomach must not have more to do than it can accomplish. The powers of digestion are known to be recovering when the stomach craves for food as the hour of nourishment arrives. If flesh is gained, strength improves; and while the tongue cleans, the appetite improves, the distention of the stomach lessens, and there is sufficient evidence that the powers of digestion are recovering. Great encouragement is then given to follow up the line of treatment which is here indicated. The patient ought also to be able to sleep six or seven hours at a time, and to lie in bed all the night. If these results follow, the ultimate cure of the case may be looked for."

This makes a very spare diet — more so than many patients are willing to submit to. For such it may be modified and rendered more tolerable by Dr. Salter's dietary in Asthma, which is as follows:

"*Breakfast:* — A cup of bread and milk, an egg, or a mutton-chop, or some cold chicken or game. Tea is

better than coffee, and milk and water better than either. *Dinner:*—Mutton ought to be the staple diet; beef or lamb rarely, pork or veal never. Succulent vegetables or potato may be eaten, and a little farinaceous pudding or stewed fruit, or fruit out of a tart, should conclude the dinner. Water is the best fluid to drink, and there should be no cheese and no dessert." A light tea should be taken.

The quantity of food eaten should be small, and therefore highly nutritious, extremely digestible, and of the simplest and plainest kind.

Diet in Heart Disease.

In organic disease of the heart the *kind* of food taken is not of so great importance as the *quantity* that is taken at one time, and the relative amount of liquids and solids.

The indications of this disease are to—

Take but a small quantity of food at a time;

Let the food contain but a small proportion of liquids to the amount of solids;

"Drink but a small quantity of liquid at any one time;

Drink no *cold* water or *cold* liquids of any kind.

In heart disease the circulation of the blood is so obstructed that absorption takes place very slowly, and hence if a large quantity of liquid be ingested it remains a long time in the stomach, thus not only interfering with digestion, but, by its proximity to the heart, embarrassing the latter organ in its action.

Hence, a patient with heart disease should take a *dry diet*. Do not begin a meal by taking a dish of soup. Take liquids by the teaspoonful, or only a sip

at a time, during meals. At other times, also, drink should be sipped only, and not swallowed down, a gobletful at a time, as is the habit with many. Take all the water that the thirst demands, only take it in the manner directed.

Whatever solid food is taken should be highly nutritious and largely composed of meats. Let beef, mutton, chicken, oysters and game form a prominent part of the diet, with a fair proportion of vegetables. In a word, the patient should have a rich, nourishing diet.

No alcohol in any shape should be taken by a person with heart disease. In enforcing this I cannot do better than give the words of Dr. Chambers:

"Alcohol is really the most ungenerous diet possible. Addiction to it impoverishes the blood, and is the surest road to that degeneration of muscular fibres which is so much to be feared. And in diseases of the heart it is especially hurtful, by quickening the beat, causing capillary congestion and irregular circulation, and mechanically dilating the cavities."

Diet in Chronic Alcoholism.

In trying to overcome the appetite for alcoholic beverages much aid may be derived from a judicious regulation of the diet. The supply of alcohol should be cut off at once. The diet should then be made to consist entirely of farinaceous food and fruits. The victim should eat no meats, chesse, eggs, nuts or other foods of this character, but the diet should be limited to the *starchy* foods alone, bread, oat-meal, potatoes, and other *vegetables*.

He should also *eat freely of fruits*. Let him take some fruits at *every meal*, and eat all of them that he

can between meals. He should indulge freely in apples, oranges, bananas, grapes, peaches, pears and all kinds of berries. In a word, he should become a *strict vegetarian*, for vegetarians do not become hard drinkers.

CHAPTER XII.

Diet in Diarrhœa and Dysentery.

A person suffering from diarrhœa should take as little food as is possible to get along with—the less the better. That which is taken should be light and easy of digestion, and such as will not irritate the mucous lining of the bowels.

But in acute attacks it is best to take *no food whatever*. The patient will not suffer from this fasting, and in many cases recovery will quickly follow if he simply maintain the recumbent posture, and take nothing but cool water or lemonade.

But if the attack be protracted it is necessary to judiciously nourish the patient.

If the food be *cool* the diarrhœa will be sooner arrested than if warm food be taken.

Recipe 60.

Milk and Lime-water.

Let the patient drink iced-milk containing a tablespoonful of lime-water to the gobletful of milk. Take small quantities at frequent intervals.

In many cases this is sufficient, and nothing more need be taken. It is refreshing, nourishing, and at the same time astringent.

Recipe 61.

RICE GRUEL.

Boiling milk, - - - one pint;
Ground rice, - - one tablespoonful.

Wet the rice with cold milk, making a smooth paste, and stir this into the boiling milk. Boil for ten or fifteen minutes, stirring well, for it will easily burn. Salt to taste.

Recipe 62.

BOILED RICE.

Boil some rice for one hour in sufficient water to cover it. Season with salt or butter and serve plain or with milk.

If properly cooked this is an excellent dish in bowel diseases. It should be cooked long enough to *completely soften* the grain. If the *grain* of the rice can be *felt* when pressed between the thumb and finger it is not done. If the grain be hard it will irritate the bowels, but if well softened it is easily digested, entirely assimilated, and is one of the best foods that can be used in bowel diseases.

Recipe 63.

THICKENED MILK.

Milk, thickened with flour and seasoned with salt makes an excellent dish in diarrhœa.

Diet in Chronic Diarrhœa.

Chronic Diarrhœa requires a greater variety and more nutritious food. Give the most digestible kinds of meat, mutton and chicken, and soft eggs. Meat broths, thickened with sago or flour, are good. Rice with milk may be added. Avoid the use of vegetables—except mealy potatoes—and all food that is relaxing to the bowels.

Diet in Dysentery.

Much that has been said on diarrhœa will also apply to this disease. But in dysentery fasting is not of so great importance, although a light diet only should be indulged in.

Cold drinks often aggravate the colic which accompanies many cases of dysentery.

A diet consisting exclusively of milk is of as great value in this disease as in diarrhœa. Take it as recommended on page 91. It may be taken cold if it does not aggravate the colic.

Recipe 64.

Eggs.

Eggs may be given either raw or soft-boiled. If cooked, no other form than *boiled* eggs should be used. Raw eggs, beaten up in milk and seasoned with sugar, make a palatable and nutritious dish, especially useful in dysentery.

Recipe 65.

Raw Meat.

Raw meat, finely scraped with a spoon so as to form a pulp, is an excellent dish. It may be spread on

a piece of toast or stale bread, and salted. Chew the bread well so that no hard pieces find their way into the stomach. This is very nourishing and does not aggravate the disease by irritating the bowels. It may be used in either acute or chronic cases.

Avoid the use of fruits and succulent vegetables.

Diet in Cholera.

During the prevalence of a cholera epidemic all persons should be very guarded in what they eat.

Avoid all food which has a tendency to derange the stomach or to relax the bowels. Eat sparingly of vegetables; eat no pickles, cucumbers, squash, green-corn, unripe fruit, or other food that is relaxing to the bowels.

Drink no ice-water, and avoid the use of alcoholic stimulants.

During the Attack

no food whatever is required. The incessant thirst from which the patient suffers it is hard to gratify, for water taken into the stomach aggravates the vomiting. And yet the patient should receive all the water that he craves *if he can retain it.* If this is impossible, much benefit may be derived from holding small pieces of ice in the mouth until they melt away. Injections of warm milk may be used with advantage if nothing can be taken by the stomach.

After the Attack

no solid food should be taken until the stools are consistent and fæcal.

Great care must be observed during convalescence. An attack of indigestion at this time is often followed by a fatal relapse.

At first only *farinaceous* food should be given, and this in *small quantities, frequently repeated.* Rice, *thoroughly cooked*, corn-starch, thickened milk, arrowroot and the like, may be first taken.

Milk, however, is to be preferred even to this, and if the patient can take it, nothing else need be sought for.

Meats. When greater variety is called for, soups and broths containing *no vegetables*, may be given, and after this meats which are simply prepared and easily digested.

Vegetables. This should be the last form of food resumed, and during convalescence the use of all vegetables must be *strictly prohibited.*

Diet in Diphtheria.

To keep the patient *well nourished* is an important part of the treatment of diphtheria, for while it is a very exhausting disease, at the same time the throat is often in such a condition that it is almost impossible to get the patient to swallow any food whatever. The pain on swallowing is so great that even adults will sometimes suffer the pangs of hunger and endure thirst rather than take food or water.

It is therefore important to begin to give a diphtheritic patient an abundance of nourishing food as soon as the disease has announced itself.

Begin with soft eggs and milk. Let the patient drink all the milk that he can be induced to take. A glass of milk with an egg beaten up in it should be given at as frequent intervals as it can be taken by the patient.

In the stage of depression, milk, eggs, and wine or brandy are called for, as the patient then needs *stimu-*

lating, as well as nourishing. Milk-punch, and similar preparations, will fulfil the indications.

Recipe 66.

MILK PUNCH.

Milk, - - - One tumblerful;
Brandy, - - - Two dessertspoonfuls.

Sweeten the milk well and stir in the brandy thoroughly. Give very cold, with ice.

Recipe 67.

EGG NOGG.

Yolks of two eggs;
One gobletful rich milk;
Tablespoonful sugar;
Tablespoonful brandy.

Beat the egg-yolks up well with the sugar; stir this well into the milk and then add the brandy.

Recipe 68.

EGG COFFEE.

Make a cup of strong coffee—add boiling milk one half; sweeten a little more than usual; beat the white and yolk of an egg together thoroughly. Boil the coffee, milk and sugar together and pour this over the beaten egg, in a cup, as you are about to serve it.

This is nutritious and stimulating, and of as great value as the preparations containing alcohol.

If the patient can no longer swallow, he should be nourished by nutrient enemata. In this way many lives may be saved, for otherwise the patient will perish of exhaustion from want of food.

Inunctions of oil will also help to keep up nutrition. Rub the legs and the abdomen well with olive oil, repeating the process several times a day.

Diet in Gastritis.

In inflammation of the stomach very little food of any kind can be taken, and during the height of the attack, when the stomach is much inflamed, there must be an *abstinence from all food.*

Whatever food is taken must be *cold.*

Let the patient take small pieces of ice in the mouth, and some bits of ice may be swallowed.

Often ice-cream can be taken when all other food is rejected. This is soothing, cooling, and at the same time nutritious. Iced-milk may in some cases take the place of ice-cream.

Lemonade may be drunk if the patient crave and retain it.

As improvement progresses, and the patient is able to take a greater variety, give *starchy* foods only, such as barley-water, rice, arrow-root and the like, but no meats. The meats are digested in the stomach, while the starchy foods are digested in the canal beyond the stomach.

If the attack be protracted, and nothing can be retained on the stomach, as is sometimes the case, then the patient must be nourished by nutrient enemata.

Exceedingly great care must be observed in returning to a solid diet after the attack, as any indiscretion is liable to be followed by a relapse. Take no meats or solid food. If milk agree, nothing more is required. When a change is made, broths and gruels may be added. The first solid food taken may be oysters, raw or stewed. These will often agree when the stomach will tolerate solid food of no other kind.

Diet in Biliousness.

In that disturbance of the liver commonly known as "biliousness," regulation of the diet will promote recovery.

Avoid the use of highly seasoned and stimulating food. Take no spirituous or malt liquors. Take no heavy meats, sweet or oily articles of food. Let the diet be light and easy of digestion, consisting mainly of vegetable food. Eat moderately, and avoid overloading the stomach.

In *jaundice* the patient should eat an abundance of green vegetables at every meal, and drink freely of cold water.

CHAPTER XIII.

Diet for Convalescents.

After a long spell of sickness, with the derangement which the digestive organs generally undergo, it is often difficult to tempt the returning appetite. Nor is it necessary to urge the matter if the patient is doing well, and not suffering from want of food. There is little desire for food so long as the tongue retains its coating, and it will be found that the returning appetite will keep pace with the cleaning of the tongue.

After recovery is so far advanced as to admit of a more generous diet, the following recipes will help to settle the much-vexed question — "What shall I eat?"

Recipe 69.

MUTTON CHOPS.

When the patient is prepared to indulge in a meat diet, mutton chops will be found to be very acceptable. They should be *broiled* over a *clear* fire for six or seven minutes; *turn frequently*, and do not prick with a fork. Serve hot; season with salt and pepper *after* they come from the fire.

Recipe 70.

GAME.

Pigeon, quail and snipe, are especially acceptable to the convalescent, and will tempt the returning appetite. Broiling is the best mode of cooking.

Recipe 71.

CHICKEN.

Tender spring chicken may take the place of the game when the latter is not to be had. It is very nice broiled, or may be stewed or fricasseed.

Recipe 72.

OMELETTE.

Two eggs;
One cupful buttermilk;
One-third teaspoonful soda;
Three tablespoonfuls flour.

Beat up the eggs, stir them into the buttermilk with the flour, add the soda, some salt, and stir all to a creamy consistence. Put three tablespoonfuls of this batter onto a hot, buttered griddle. When one side is brown, *fold it on itself*, turning one half on the other. Serve hot and eat with butter or syrup.

It can also be made with sweet milk and baking powder.

Recipe 73.

MILK TOAST.

Pare off the crust from stale, light bread; slice half an inch thick and toast *quickly*. Dip each slice, as it comes from the toaster, in boiling water.

Butter *thinly*, sprinkle a little salt over, and lay in a deep, covered dish.

Have ready in a sauce-pan enough boiling milk to cover the toast well. Thicken this a very little with flour, being careful that it is not lumpy. Salt this milk, melt in it a bit of butter, and pour over the toast. Cover closely and let it stand five minutes before serving.

Recipe 74.

POTATO SURPRISE.

Scoop out the inside of a sound potato, leaving the skin attached on one side of the hole, as a lid. Mince up finely the lean of a juicy mutton-chop, with a little salt and pepper, put it in the potato, pin down the lid, and bake or roast. Before serving — in the skin — add a little hot gravy if the mince seems to be too dry.

Recipe 75.

TOMATO SOUP.

Peel six good-sized tomatoes and cut them into small pieces; put them into a sauce-pan, with a quart of water, and boil until tender; season with salt and pepper. Now stir into the water half a teaspoonful of baking-soda. Lift the kettle from the stove when stirring in the soda, or the soup will run over as it foams. Boil again, and add a pint of sweet milk. Put

broken crackers into a dish, pour the soup over them and serve immediately.

This is an excellent dish for convalescents, being often taken with relish when nothing else tempts the appetite. It may be used in all cases except where there is a tendency to looseness of the bowels.

Recipe 76.

SAGO CUSTARD.

Two eggs;
One pint milk;
One tablespoonful sago.

Boil the sago in a little water till clear; add the milk and let it come to a boil, then add the eggs, well beaten, and sugar to taste. Put the vessel containing the custard into another vessel of boiling water; stir till it thickens a little. When partly cold flavor with lemon or vanilla.

Recipe 77.

SPANISH CREAM.

One quart milk;
Yolks of three eggs;
One-half box gelatine;
Two tablespoonfuls sugar.

Soak the gelatine for an hour in the milk, put on the fire and stir well as it warms. Beat the yolks very light with the sugar, add to the scalding milk, and heat to boiling point, stirring all the while.

Flavor with vanilla or lemon. When almost cold, put into a mould wet with cold water.

Recipe 78.

BAKED CUSTARD.

Two eggs;
One pint milk;
Two tablespoonfuls sugar.

Scald the milk; beat the yolks up with the sugar, add this to the milk, and when well mixed stir in the whites, previously beaten light. Flavor to taste. Pour into cups and bake until firm. Eat cold from the cups.

Recipe 79.

ARROWROOT JELLY.

Boiling water, - - one cup;
Arrowroot, - - - two teaspoonfuls;
White sugar, - - two teaspoonfuls.

Dissolve the sugar in the cup of water; put this on the fire and bring it to a boil. Wet the arrowroot in a little cold water, and rub it smooth. Stir this into the hot water *while it is boiling*. Add one teaspoonful of lemon-juice and keep it boiling until it is clear. Wet a cup in cold water, and pour in the jelly to form.

Eat when *cold*, with cream and sugar. This is a delicate dish and will tempt many a dainty appetite.

Recipe 80.

SAGO BLANC-MANGE.

One pint milk;
One-half pound sago.

Soak the sago in cold water for four hours. Heat the milk and stir in the soaked sago. When it has dissolved, sweeten to taste. Boil slowly fifteen minutes, stirring all the time; take from the fire, flavor, beat

until nearly cold, pour into moulds dipped in cold water. Turn out and eat with sweetened cream.

Recipe 81.

FLOATING ISLAND.

One pint milk;
Two eggs;
Two tablespoonfuls white sugar;
Teaspoonful vanilla extract.

Beat the yolks well, stir in the sugar, and add the hot, not boiling, milk, a little at a time. Boil until it begins to thicken. When cool add the flavoring, pour into a glass dish, first stirring well. Heap upon it a meringue of the whites beaten to a froth. This well-known dish makes a very agreeable one for the sick or convalescent.

Recipe 82.

COTTAGE CHEESE.

Heat sour milk until the whey rises to the top. Pour off the whey, put the curd in a bag and let it drip for six hours, without squeezing it. Put it in a wooden bowl, chop fine with a wooden spoon, salt to taste, and work to the consistence of soft butter, adding a little cream and butter as you proceed. Mould into balls and keep in a cool place. It must be eaten when fresh.

There are few nicer dishes than this for the sick or convalescent.

Besides these domestic dishes, preparations of malt, extract of malt or maltine, will help to build up the atrophied tissues and hasten the return of strength.

Recipes for other dishes which can be used in convalescence will be found in the next chapter.

CHAPTER XIV.

Recipes.

In this chapter will be found recipes for a great variety of dishes, and from among these can be selected something adapted to almost every case of illness, if not found in the body of the book, under its appropriate head.

Beverages.

To allay the thirst from which the sick so often suffer, especially in fevers, is not the least important part of the treatment. A proper supply of liquid not only helps to moderate the fever, keep the kidneys active, make the tissues soft and the membranes moist, but it also adds to the patient's comfort, and prevents to a great extent that restlessness with which it is so frequently accompanied.

Fever-patients, especially when there is delirium or stupor, in which conditions they are unable to make their wants known, often suffer from want of water. In all such cases water should be offered at frequent intervals.

But pure water, if taken too freely, is apt to disorder the stomach and bowels. It is found that the addition of certain substances to water greatly increases its power to quench thirst. Acids, in particular, seem to possess this power. A weak infusion of cascarilla or orange peel, acidulated slightly with

hydrochloric acid, was, with Dr. Graves, a favorite thirst-allaying drink for fever-patients.

The following recipes will afford an ample variety for all cases:

Recipe 83.

RASPBERRY SYRUP.

Put 6 pounds of raspberries into a china or glass bowl, with a quart of water in which has been dissolved $2\frac{1}{2}$ ounces of citric (or tartaric) acid, and let it remain 24 hours; then strain it, taking care not to bruise the fruit. To each pint of clear liquor add $1\frac{1}{2}$ pounds of loaf sugar, and stir it till dissolved. Leave it for a few days and then bottle securely.

A little of this syrup in water forms a refreshing drink for fever-patients.

Recipe 84.

STRAWBERRY SYRUP

may be made according to the same rule, using two ounces of citric acid.

Recipe 85.

RASPBERRY VINEGAR.

Put a pint and a half of the best wine-vinegar to three pounds of raspberries, in a glass or porcelain vessel; let this stand for two weeks, then strain *without pressure*. Put into bottles, well-corked.

Recipe 86.

RASPBERRY VINEGAR.

Mash the raspberries in a crock, cover well with *pure* cider vinegar. Let this stand for twenty-four hours, giving it an occasional stirring.

The next day strain off the vinegar and juice into another crock, containing the same quantity of mashed berries as first used.

Let this stand until the following day, when the juice should be again strained off.

Now add one-half the quantity of water that you have vinegar, and to this mixture add three pounds of white sugar to each quart.

Now stir over a gentle fire until the sugar is dissolved. Bring slowly to the boiling point, skimming meanwhile, and as soon as it boils, strain again. Bottle immediately and seal the corks well.

A tablespoonful or more to a glass of ice-water makes a very refreshing drink in sickness.

Recipe 87.

JELLY WATER.

Jelly, - - - - one tablespoonful;
Ice-water, - - - one goblet.

Any jelly may be used, currant-jelly, cranberry-jelly, or other kind. Very tart jellies are the best. Stir up the jelly in the ice-water until the two are well mixed.

Recipe 88.

APPLE-WATER.

One large, juicy apple;
Three cups cold water.

Let the apple be a juicy, finely flavored one. Pare and quarter it. Put on the fire in a closely-covered sauce-pan, with the water, and boil until the apples stew to pieces. Strain the liquor as soon as it is taken from the fire, pressing the apple hard in the cloth. Set away to cool. Sweeten to taste with white sugar. Drink ice-cold.

This is a very refreshing and palatable drink, and forms an agreeable change from the more common ones.

Recipe 89.

LEMON WHEY.

Put a quart of new milk into a sauce-pan and stir it over the fire until it is *nearly* boiling; then add the juice of one lemon and let it simmer for fifteen minutes, skimming off the curd as it rises. Add the juice of another lemon, skim for a few minutes, strain, and it is ready for use.

Recipe 90.

WINE WHEY.

Fresh milk, - - -	one pint;
Sour wine, - - -	one wineglassful;
Sugar, - - - -	one teaspoonful.

Put the milk into a shallow sauce-pan and bring it to the boiling point. Pour in half the wine, stir gently and let it simmer, and skim off the curd which rises. After a few minutes pour in the rest of the wine, skim the remaining curd, sweeten, and when cold it is ready for use.

Good in fevers.

Recipe 91.

WHEY POWDER.

Sugar-of-milk, - - -	two ounces;
Powdered white sugar, -	eight ounces;
Gum Arabic, powdered, -	one ounce.

Mix. Dissolve half an ounce of this in a pint of water. This makes a demulcent drink for use in bronchitis, pleurisy or pneumonia.

Recipe 92.

To Whiten Whey.

Beat up the white of an egg with a portion of the whey, mix with the rest, boil for a moment and run it through a jelly-bag.

Recipe 93.

Mint Water.

Boiling water, - - -	half a pint;
Green spearmint leaves, -	a handful.

Bruise the leaves, put into a dish, cover with boiling water; steep fifteen minutes. Drink hot or cold.

Good in nausea.

Recipe 94.

Tamarind Water.

Tamarinds, - -	one tablespoonful;
Ice-water, - - -	one gobletful;
Sugar, - - -	one teaspoonful;

Stir the tamarinds in the water until dissolved; strain and sweeten.

Good in constipation.

Recipe 95.

Lemonade.

Take two lemons, wipe clean and peel *very thin*,* being careful to cut off none of the pith, or white. Now cut off all the pith and throw it away. Cut the lemons into thin slices, take out all the seeds, put the slices and the rind of *one* lemon into a pitcher, add a tablespoonful of sugar, pour onto these a pint and a

* In preparing lemon-peel for flavoring, pare very thin shavings from the surface, getting in none of the *white*, as this will render it bitter.

half of *boiling* water; cover and stand on the ice to cool. When cold, strain into another pitcher and it is ready for use.

Although this involves more time and attention than is usually given to the making of lemonade, yet the superior quality obtained well repays the extra trouble.

Recipe 96.

ICELAND MOSS LEMONADE.

One handful Iceland Moss;
Two quarts boiling water;
Two lemons.

Wash the moss in two waters. Peel and slice the lemons, throwing away the peel. Mash the sliced lemon up with four tablespoonfuls of sugar; mix this with the moss, and pour over it the boiling water. Let it stand until cold. Sweeten to taste, and take it ice-cold. If too thick, add cold water.

Recipe 97.

FLAX-SEED LEMONADE.

Four tablespoonfuls whole flaxseed;
One quart boiling water;
Juice of two lemons;
Sugar to sweeten.

Put the flaxseed in a pitcher, pour on the boiling water, cover it and let it steep for three hours. When cold add the lemon-juice and sweeten to taste. If too thick, thin with cold water.

Let the patient have it ice-cold. The last two recipes make soothing drinks in throat and lung troubles.

Recipe 98.

EGG LEMONADE.

Beat up one egg to a froth; make one goblet of lemonade, using the juice of an *entire* lemon; sweeten to taste, stir in the egg and add pounded ice.

This is a delicious and refreshing drink for the sick, and has, moreover, some nutritive value.

Recipe 99.

HOT LEMONADE.

Lemon-juice, – –	two tablespoonfuls;
Boiling water, – –	one gobletful;
Sugar, – – –	one tablespoonful.

Put all into a hot bowl and stir for a few minutes. Drink hot.

Good when it is desired to induce a perspiration.

Recipe 100.

LEMON-ICE.

Six lemons;
One large sweet orange;
One pint of water;
One pint of sugar.

Grate the peel of three of the lemons, and remove the rind of the orange. Squeeze out every drop of juice from the orange and all the lemons, and steep it in the rind of orange and lemons one hour. Strain, squeezing the bag dry; mix in the sugar, and then the water. Stir until dissolved, and freeze in a freezer, opening three times to mix all together.

Recipe 101.

BARLEY-WATER.

One pint boiling water;
Two ounces pearl barley;
Lemon-peel and sugar.

Wash the barley well in two or three waters. Put this into a pitcher, together with a tablespoonful of sugar and the peel from a quarter of a lemon, cut *very thin*. Pour onto this one pint of *boiling* water. Cover the pitcher and let it stand on ice until cold. When cold strain into another pitcher and it is ready for use.

Recipe 102.

THICK BARLEY-WATER.

Wash the barley as in R. 101. Put it in a sauce-pan, pour over it two quarts of *cold* water, bring to a boil, and let it boil for *two* hours. Pour into a pitcher with the *thin* peel of half a lemon; set it on ice to become perfectly cold. When cold, take out the lemon-peel and sweeten to taste.

Recipe 103.

BARLEY-WATER.

Boiling water, - - two cups;
Barley, - - - - two tablespoonfuls.

Wash the barley and soak it half an hour in a little luke-warm water, and stir, without draining, into the boiling water, salted very slightly. Simmer one hour, stirring often. Sweeten to taste and strain before using. This may be used temporarily as a substitute for milk when the latter disagrees.

Recipe 104.

OATMEAL-WATER.

Oatmeal,	– – –	two tablespoonfuls;
Cold water,	– –	one pint;

Stir the meal into the water, and let it stand one hour; strain and drink cold.

A refreshing drink in hot weather. Good in constipation.

Recipe 105.

TAPIOCA-WATER.

Tapioca,	– – –	one tablespoonful;
Cold water,	– – –	one gobletful;
Boiling water,	– –	one pint.

Wash the tapioca and soak it in the cold water two hours; pour the boiling water over it and boil slowly until the tapioca is dissolved.

Food in sickness of the stomach.

Recipe 106.

SAGO MILK.

Sago,	– – – –	one tablespoonful;
Cold water,	– – –	one teacupful;
Fresh milk,	– – –	one quart.

Wash the sago and soak it over night; put it into a farina kettle; boil till clear; sweeten. Drink hot or cold.

Recipe 107.

RICE-FLOUR MILK.

Boiling milk,	– –	two cups;
Rice-flour,	– – –	two tablespoonfuls.

Wet the rice-flour up with cold milk, and stir it into the boiling milk. Let it boil for ten minutes, stirring all the time. Sweeten to taste and eat warm with cream.

This makes a simple, yet nourishing, dish for the sick.

Recipe 108.

TOAST-WATER.

Cut thin slices of bread, and toast till nicely brown, with no suspicion of burning. Put several such slices into a bowl and pour over enough *boiling* water to cover. Cover the bowl closely, and let it steep until cold. When cold, strain, sweeten to taste and put a piece of ice into each glass. It may be flavored with lemon-juice.

This may be freely indulged in. It is of *very slight* nutritive value, and must not be depended upon as a food.

Recipe 109.

ELM TEA.

Take nice slippery-elm bark, break it into bits, pour boiling water over it, cover and let it stand until cold. Take with ice, and sweeten if desired.

Recipe 110.

GUM ARABIC WATER.

Gum Arabic, two teaspoonfuls;
Hot water, one pint;
Sugar, one teaspoonful;
Lemon-juice of one lemon.

Put all into a pitcher: keep it on a hot stove till the gum is dissolved. Use when cold.

The last two may be used as demulcent drinks in throat troubles and coughs.

Recipe 111.

CAFE AU LAIT.

Fresh, *strong* coffee, and boiling milk, equal parts.

Strain the hot coffee through some muslin into the pot from which it is to be served. Add the hot milk immediately, set the pot on the hot stove for five minutes, and it is ready to serve.

Recipe 112.

COFFEE AND EGG.

Make a cup of strong coffee, adding boiling milk as usual, only sweetening rather more; take an egg, beat yolk and white together thoroughly; boil the coffee, milk and sugar together, and pour it over the beaten egg in the cup in which you are going to serve it.

This simple recipe is used frequently in hospital practice. A sick person, needing nourishment and having lost appetite, can often be sustained by this when nothing else can be taken.

Recipe 113.

EGG-WATER.

Cold water, one gobletful;
Whites of two eggs;
Sugar to sweeten.

Stir the eggs gently into the water, but do not beat them; add the sugar, or a little salt.

This is a bland, and yet nourishing, drink, which can be taken by a delicate stomach, when everything else is rejected.

Recipe 114.

EGG-NOGG.

One egg;
Milk, - - - - one gobletful;
Sugar, - - - two teaspoonfuls;
Wine, - - - - two tablespoonfuls;
Powdered sugar, - one tablespoonful;
Powdered ice.

Break the yolk of the egg and the sugar together and stir them into the milk; add the ice and wine. Lastly, beat the white of the egg to a froth and whip it in.

Recipe 115.

RENNET WINE.

Cut one calf's rennet into pieces an inch square; put into a bottle with a quart of sherry wine; cork tight and set in a cool place. After standing forty-eight hours, it is ready for use. One tablespoonful will coagulate one quart of milk.

Recipe 116.

RENNET WHEY.

Fresh, warm milk, - one quart;
Salt, - - - - one saltspoonful;
Rennet wine, - - one tablespoonful.

Add the salt and the wine to the milk, stirring only till mixed. Let it stand until cold. When it has coagulated, cut the curd across several times with a knife, to free the whey. Strain through muslin.

Eat with a little cream added.

Broths and Soups.

To Stew Oysters.

Take one quart of liquid oysters, put the liquor (a teacupful for three persons), in a stew-pan, and add half as much more water; salt; a good bit of pepper; a teaspoonful of rolled cracker for each person. Put on the stove and let it boil; have your oysters ready in a bowl. The moment the liquor begins to boil pour in all your oysters, say ten for each person. Now watch carefully, and as soon as it begins to boil take out your watch, count just thirty seconds, and take your oysters from the stove.

You will have your big dish ready with one and a half tablespoonfuls of *cold* milk for each person. Pour your stew on this milk and serve immediately. Never boil an oyster in milk.—(*Delmonico.*)

Recipe 117.

Oyster Broth.

Oysters, - - - - one pint;
Cold water, - - - one half pint;
A little salt and pepper.

Cut the oysters into small pieces, put into a sauce-pan with water and salt, and simmer ten minutes; skim, strain off the broth, and add the pepper. A little milk may be added for those who prefer it. Serve hot, with toast.

Recipe 118.

Mutton Broth.

Lean mutton, - one and a half pounds;
Cold water, - - one quart;
Salt to season.

Free the mutton entirely from fat; cut it up fine; put it into a saucepan with the water and salt and stew it for two hours. Thicken slightly with flour.

When cool, remove all fat from the surface. Heat a small quantity, as required.

Recipe 119.

CHICKEN SOUP.

One young chicken;
Cold water, two quarts;
Salt.

Cut the chicken up, and pound until the bones are broken; add the water and salt, and stew for two hours; when done strain it, and let it cool. Remove all fat, and heat as required.

Recipe 120.

VEAL SOUP.

Take one pound of veal—almost any cut will do—put it into one quart of cold water, salt, boil slowly for two hours. Before taking from the fire stir in a little flour, previously made into a thin paste with cold water, and free from lumps.

Recipe 121.

RAW-BEEF SOUP.

Chop fine one pound of raw beef, put it in a bottle with one pint of water and five drops of muriatic acid. Let this stand on the ice all night. In the morning set the bottle in a pan of water at 110° F. for about two hours. Strain through a cloth until the mass is nearly dry. If the raw taste be objectionable, the beef to be used should be roasted quickly on one side; then make as above.

This beef soup may be substituted for milk in those cases in which the latter is called for but cannot be taken.

Recipe 122.

BEEF ESSENCE.

Lean, juicy beef, – – – one pound;
Cold water, – – – – one pint;
Salt to season.

Free the beef from fat, and pound it; broil it two minutes over a very hot fire; mince it fine; put it into a jar with the cold water and salt, and let it soak several hours; tie a cloth over the mouth of the jar, set it in a kettle of cold water, bring this to a boil, and let it boil slowly for ten hours. Strain and season.

Other recipes for beef-tea will be found in Chapter IV.

Gruels.

Recipe 123.

OATMEAL GRUEL.

Take three ounces of oatmeal and boil slowly in four pints of water, till reduced to two pints. Strain through a sieve. Add milk if it is wanted thin.

Recipe 124.

CORNMEAL GRUEL.

Cornmeal, – – – – one cupful;
Boiling water, – – – – one quart;

Make a thin paste of the meal, mashing out all lumps. Stir this into the *boiling* water, letting it boil for three-quarters of an hour, being careful that it does not burn. Salt to taste.

Recipe 125.

Sago Gruel.

Water, - - -	two cupfuls;
Sago, - - - -	two tablespoonfuls;
Sugar, - - -	three teaspoonfuls.

Put the sago into water and warm it by setting in a saucepan of boiling water. Keep it hot for one hour, stirring often. Now boil it for ten minutes, stirring well; season with lemon or vanilla, and pour into a bowl to cool. Eat it either warm or cold.

Recipe 126.

Arrowroot Gruel.

Take three teaspoonfuls of arrowroot flour; mix this into a soft paste with a little cold water; pour upon this half a pint of boiling water, stirring well until it is thoroughly mixed; boil for five minutes, add some milk and a little salt, and sweeten to taste.

Recipe 127.

Farina Gruel.

Farina, - - -	one tablespoonful;
Boiling water, - -	one pint;
Salt, - - -	a pinch.

Sprinkle the farina into the water as it boils, stirring briskly to prevent lumps forming. Season with salt, and simmer half an hour.

Just before removing from the fire, stir in a tablespoonful of cream.

Recipe 128.

Rice, - - two tablespoonfuls;
Cold water, - - one cupful;
Fresh milk, - a pint and a half;
Sugar and salt.

Wash the rice and soak it in cold water one hour; put into a farina kettle with the milk and simmer until the rice is *well done*. Strain through a wire sieve and season.

Recipe 129.

BOUILLIE.

The *bouillie* commonly used in France as the first food for infants, is made by gently roasting the best wheat flour in an oven, then boiling it for a considerable time either in water, or in milk and water, and adding sugar.

Vegetables.

Recipe 130.

ASPARAGUS.

"Bind the asparagus in a bundle with a piece of tape, keeping the buds all one way; cut the stalks of equal length, and be careful to cut off all that is tough. Put it into a porcelain-lined kettle, with enough slightly-salted boiling water to cover, and boil until tender. Season delicately with butter and pepper, and more salt if desired."

Recipe 131.

BAKED POTATOES.

"Wash and wipe dry as many potatoes as are required, being careful to have them of uniform size.

Bake in a brisk oven until they yield to pressure between the fingers; remove at once from the oven and break the skin to let out the steam. Serve immediately with salt, butter and pepper."

Recipe 132.

STEWED CELERY.

"After the celery has been thoroughly washed, cut the stalks into pieces four or five inches long, lay them (all one way) in a saucepan, with just enough slightly-salted, boiling water to cover. Boil slowly until tender, drain, and season with butter and pepper." Of reputed value in rheumatism.

Bread.

Recipe 133.

RICE BREAD.

Make a sponge of

Warm water, - -	one quart;
Yeast, - - - -	one teacupful;
White sugar, - -	one tablespoonful;
Lard, - - - -	two tablespoonfuls;
White flour, - -	one quart.

Beat well together, and in about five hours, when it has risen, add three pints of warm milk, and three teacupfuls rice-flour wet to a thin paste with cold milk, and boil four minutes, as you would starch. This should be little more than luke-warm when it is stirred into the batter. If not thick enough to make into a dough, add a little wheat flour. Knead thoroughly, and treat as you would wheat bread in the matter of two risings and baking. This is a nice and delicate bread for invalids, and keeps well.

Recipe 134.

UNFERMENTED BROWN BREAD.

Mix three pounds of brown-flour with ten drachms of bicarbonate of soda; make this into a dough with twenty-five ounces of cold water containing twelve and a half fluid drachms of muriatic acid. Bake immediately it is prepared.

Recipe 135.

BREAD PANADA.

Place in a saucepan some very thin slices of bread-crumb, and rather more water than will cover it. Boil until the bread becomes pulpy, strain off the superfluous water, and beat up the remainder to the consistence of gruel. Season to taste. Some prefer it sweetened, while others eat it with salt and pepper.

Recipe 136.

RUSK.

Toast dry crusts of bread in a moderate oven until they are well browned; do not let them burn. When cold, pound in a mortar, or grind fine in a coffee-mill, until reduced to a coarse meal. Eat in a dish with milk or cream, as you would mush. Sweeten if desired.

Recipe 137.

CRACKER PANADA.

Split ten small oyster crackers, spread each piece with butter, and lay them in a bowl. Sprinkle with sugar, pour on enough hot water to cover, and grate a little nutmeg over them. Cover the bowl and let it stand five minutes.

Recipe 138.

CRACKER PANADA.

Six Boston crackers;
Two tablespoonfuls white sugar

Split the crackers and pile in a bowl in layers, the sugar and a little salt scattered among them. Pour enough *boiling* water on them to cover them, and set on the hearth, closely covered for more than an hour.

Eat from the bowl, with more sugar, if desired. The crackers should be clear, soft and jelly-like, but not broken.

Recipe 139.

BREAD SAUCE.

Crumb up two slices of stale bread, or two dry biscuits; pour on this half a pint of hot water; season with salt and pepper; boil until it is smooth and add a piece of butter. A little onion will lend it zest for some.

Recipe 140.

BREAD JELLY.

Cut the crust from some slices of stale bread, and toast nicely without burning. Pile in a bowl, sprinkling sugar and a little salt between; cover well with *boiling* water, and set, with a tight lid on top, in a pan of boiling water. Simmer well until the contents of a bowl are like jelly. Eat warm with powdered sugar and nutmeg.

Blanc-Manges and Custards.

Recipe 141.

ARROWROOT BLANC-MANGE.

Milk, – – – one teaspoonful;
Arrowroot, – – – four teaspoonfuls;
Sugar, – – – two teaspoonfuls.

Make a *smooth* paste of the arrowroot, with cold water. Stir this into the milk while the latter is boiling. Add the sugar, flavor with vanilla, stir all the time and boil until it thickens. Turn out, and when cold eat with cream.

Recipe 142.

ARROWROOT CUSTARD.

Boiling milk, – – two cupfuls;
Arrowroot, – – three teaspoonfuls.
One egg and two tablespoonfuls white sugar well beaten together.

Wet the arrowroot up with a little cold milk, mix this paste with the *boiling* milk, and stir for three minutes. Take it from the fire and whip in the egg and sugar. Boil two minutes longer, flavor with vanilla or other extract, and pour into moulds.

Recipe 143.

TAPIOCA JELLY.

Cold water, – – – three cupfuls;
Tapioca, – – – – one cupful;
Juice of one lemon.

Put the tapioca in a two-quart basin, and pour over it sufficient water to cover it. Let it soak four hours. Now set the basin in a saucepan of boiling

water; pour more warm water over it, if it is too thick. Keep the water in the saucepan boiling, and stir the tapioca frequently. Cook until it becomes *clear*. If too thick at this time, put in a very little boiling water. When quite clear, put in the lemon-juice and sweeten to taste. Pour into molds. Eat cold, with cream, flavored to suit.

This will be found to be an excellent dish, easily digested, simple, and very tempting to the sick.

Recipe 144.

FARINA BLANC-MANGE.

Milk, - - - one pint;
Farina, - - - two tablespoonfuls.

Heat the milk to boiling; stir in the farina and a little salt. Boil for twenty minutes in a farina-kettle. Flavor and sweeten to taste and pour into moulds. Set in a cool place. Eat with cream and sugar.

Recipe 145.

TAPIOCA BLANC-MANGE.

Tapioca, - - - one cupful;
Boiling milk, - - three cupfuls;
White sugar, - - three tablespoonfuls.

Soak the tapioca four hours in two cups cold water, and stir the whole into the boiling milk. Sweeten and boil slowly for fifteen minutes, stirring all the while. Take off, flavor to suit, and pour into moulds.

Eat cold with cream. Wash the tapioca well before soaking.

Recipe 146.

TAPIOCA PUDDING.

Take an ounce of tapioca, soak it in an ounce of cold water for two hours; pour off this water, add a

pint and a half of milk and boil slowly until it is well incorporated; stir into this one-half ounce of sugar beaten up with two eggs. Season with lemon.

Recipe 147.

GELATINE JELLY.

Place one ounce of gelatine in half a pint of cold water—soak for ten minutes; add half a pint of boiling water and stir until the gelatine is dissolved. Add the juice of two lemons, sugar, and the white of an egg, well beaten; stir these in, boil for two or three minutes, strain through a jelly-bag, and let it set.

Recipe 148.

GELATINE CHARLOTTE RUSSE.

One pint cream;
One-half ounce gelatine, dissolved in a cup of hot milk;
Whites of two eggs;
Two tablespoonfuls of white sugar.

Whip the cream light, beat the eggs to a stiff froth, and mix these and the sugar all three together. Flavor with lemon or vanilla, and last beat in the gelatine, which should be quite cold before it is added. Pour into a dish and set on the ice. This is a nice dish for those who can take anything so rich.

Recipe 149.

JELLY OF ICELAND MOSS.

One handful Iceland moss;
One quart boiling water;
Juice of two lemons.

Wash the moss in five waters, and let it soak for an hour in a little cold water. Now stir it into the

boiling water and simmer until it is dissolved. Put in the lemon-juice, sweeten to taste and strain into moulds.

Recipe 150.

CHICKEN JELLY.

Half a spring chicken;
One quart cold water.

Break all the bones by pounding the chicken with a mallet, bones and meat together. Put this in a saucepan, pour on the cold water, cover the vessel, and let it simmer slowly until the meat is reduced to shreds and the liquid boiled down one-half.

Now remove it from the fire, strain it, and press it first through a cullender, then through a coarse cloth. You will have now a thick liquid which you can salt to taste (pepper if allowable). Return it to the fire and let it simmer five minutes longer. Pour into a dish and skim when cool. This will, when cold, set into a jelly. It is best to keep it on the ice.

Slice it up and give to the patient cold, just off the ice. It may be eaten alone, or with toast, Albert biscuit, or unleavened wafers. It is very nice made into sandwiches by putting the jelly between thin slices of bread spread lightly with butter.

This chicken jelly is one of the most delicate meat dishes for the sick. It can be given in a great variety of cases, it is easily made and very tempting to a dainty appetite. Some patients can take this *cold* when nothing else of a solid nature can be eaten.

CHAPTER XV.

Soups and Broths.

A diet which is adapted to the wants of the sick must consist largely of dishes which are liquid in form, because an irritable stomach, or one which is in any way enfeebled by disease, is not equal to the demands which solid food would make upon it. Therefore liquid food, which is so much more easy of digestion, must form a very important part of the invalid's dietary. Such dishes must be both palatable and nutritious. The most important class of liquid food consists of soups and broths.

Recipe 151.

STOCK, OR BOUILLON.

In making stock always begin with cold water. Salt should never be added until the meat is thoroughly done. If put in early it hardens the meat.

To each pound of fresh, lean meat, allow one quart of cold water.

Have the bones well cracked, and extract the marrow, which should be put into the pot.

Put the beef, bones and water into a covered vessel and set it where it will heat *gradually*.

Let it boil *very slowly* for six or seven hours.

Look at it occasionally to see if the water is sinking too rapidly.

Should this occur, replenish with *boiling* water, taking care not to add too much.

When it has boiled seven hours, pour it out of the iron pot into a crock, and let it stand, well covered, till the next day.

About an hour before it is wanted for use, remove the cake of fat which will have formed on the surface, and take out the meat and bones.

Strain the stock back into the iron pot, through a napkin placed in a colander, so that no bones, meat or sediment shall pass.

Set it over the fire, and when warm throw in a *little* salt to bring up the scum, which must be skimmed off.

Made in this way, this is the stock for *bouillon;* if, in the cooking, it be allowed to boil down one-half, instead of replenishing with hot water, it is *soup stock.*

With this stock, by the addition of different seasonings or vegetables, a great variety of *bouillons,* or soups may be made.

General Considerations.

Stock is the most important part of soup-making—it is the *basis* of the soup.

Soup stock cannot be made "in a hurry;" good soup requires two days.

Fresh meat only must be used—it cannot be made from old scraps.

The *least bit* of tainted meat will spoil a whole mess of soup.

Season in *moderation*—it is difficult to restore a soup which has been over-seasoned.

Soup stock should be allowed to cool *slowly*—if cooled too quickly it will not keep so well.

Do not allow stock to become *cold* in an *iron* vessel—if it cannot be kept constantly warm on the stove,

it must be put into an earthen crock until wanted for use.

In winter any kind of stock ought to keep good for a week.

In warm weather three days is about as long as it will keep.

Vegetables should not be put into soup more than an hour before it is wanted; if put in too soon they make the soup sour and spoil the flavor.

On the second day soup should not be allowed to boil more than half an hour *after ebullition begins.*

The difference between *bouillon* and *soup* is that the latter is "boiled down," or reduced by prolonged boiling. Soup is richer, but less delicate than *bouillon. Bouillon,* also, gives the best flavor of the meat.

When milk or cream are to be added to soup, they should first be brought to a boil, and added while hot.

When eggs are added to soup, beat them thoroughly and add while the soup is *hot,* but *not* boiling. The best plan is to beat up the egg with a little of the warm soup, and then add it gradually.

Recipe No. 151, for making *bouillon,* is that which gives the best article. However, it can be, and often is, made on the same day that it is wanted for use, but it is always best if prepared the day before. If it is to be used on the same day that it is made, proceed as already directed until the six or seven hours cooking has been completed. About an hour before it is wanted, remove the meat, empty the pot, and carefully strain the stock back into it; then add seasoning and vegetables, according to the variety of *soup* or *bouillon* desired.

Recipe 152.

BEEF-TEA.

Fresh, lean beef - - one pound;
Cold water - - - one pint.

Free the meat from all fat, gristle and bones, cut it into fine pieces, and soak it two hours in the cold water. Now put it into a double boiler, and let the water in the outer vessel boil three hours. Then strain, and season to taste with salt and pepper. Skim off all fat, and serve hot.

Recipe 153.

BEEF-TEA.

Lean Beef - - - one pound;
Cold water - - - one pint.

Chop the meat very fine, and let it soak in the water one hour; put all into a stout bottle, set this in a kettle or sauce-pan of warm water, and let the latter boil one hour. Strain the beef-tea from the bottle, season and serve.

Recipe 154.

MUTTON BROTH.

Lean Mutton - - one pound;
Cold water - - - one quart.

Free the mutton from fat, and cut it into thin slices with a sharp knife; put it into a suitable dish with the cold water, but *no salt*, and let it boil until the meat falls to pieces—about an hour and a half. Strain it, add pepper and salt to taste, and what other seasoning is desired, and let it simmer half an hour longer. Serve hot.

VARIETIES.

This broth can be enriched by adding a teacupful of hot milk five minutes before it is removed from the stove.

It can also be prepared with a tablespoonful of rice, previously soaked in warm water. The rice should be cooked in a separate dish until *soft*, then pressed through a sieve, and added to the broth at the time that it is strained.

It may be flavored with celery, parsley, tomato, or any other seasoning, as given in Recipe No. 157.

Recipe 155.

CHICKEN-BROTH.

Chicken – – – – one-half;
Cold water – – – one quart;
Celery – – – – a little.

Chop the chicken into neat pieces, breaking the bones and removing all fat; put it into a small sauce-pan, add the water and celery, and let it simmer for two hours. Salt and pepper to taste, strain into a bowl, remove any fat that may remain on the surface, and serve.

Recipe 156.

CREAM OF RICE.

Rice – – – one-half teacupful;
Chicken stock – – – one quart;
Milk – – – – – one pint.

Wash the rice carefully, picking out all imperfect grains, and put it into the stock, made according to the last Recipe (No. 155). Let it simmer for one hour, adding a little *boiling* water if it gets too low. Now

take out the rice, rub it through a sieve, return it to the stock; season to taste, and, just before serving, add the milk, which has been allowed to come to a boil.

Invalids soon tire of plain beef-tea or plain broth, if given day after day. This difficulty, however, may be overcome by using a variety of seasoning, which will render the broths more agreeable to the palate, and vary that monotony which would otherwise attend their use.

Recipe 157.

SEASONINGS.

Therefore, in preparing beef-tea or broth, from time to time season with some one of the following:

1. A little chopped celery.
2. A little chopped parsley.
3. A few blades of mace.
4. The juice of a lemon.
5. A *very* little onion.*
6. A little strained tomato.
7. Asparagus, when in season.
8. A few cloves.

Recipe 158.

WHITE SOUP.

Soup stock	one quart;
Tapioca	one-half cup;
Cream	one pint;
Cold water	one-half pint;
Small onion	sliced;
Mace	a little.

* According to Sydney Smith's judicious advice,

"Let onions' atoms lurk within the bowl,
And, scarce suspected, animate the whole."

Let the tapioca be soaked over night; add it to the stock, and boil them together one hour.

In another vessel put the cream, water, onion and mace, and salt and pepper to taste. Let this simmer twenty minutes, and them strain it into the stock. Serve immediately. It must not be left on the stove.

Recipe 159.

BISQUE.

Tomatoes – – –	one quart can;
Milk – – –	three pints;
Flour – – – –	one tablespoonful;
Soda – – –	scant tablespoonful.

Put the tomatoes on to stew. Put the milk in a double boiler, reserving a cupful to mix with the flour. Mix the flour carefully with the cold milk, stir it into the boiling milk, and cook ten minutes.

To the tomato add the soda, *stir it well*, and then rub it through a strainer fine enough to keep back all the seeds. Now add to the milk salt and pepper to taste, and a small piece of butter; then add the tomato, and stir all well together. Serve immediately.

If half the quantity is made stir the tomato well in the can before taking out half.

This makes a very delicate and nourishing soup, for either an invalid or the table.

Recipe 160.

SAGO BROTH.

Soup stock – – – –	one quart;
Sago – – – –	one-half cup;
Egg – – – – –	one yolk.

Soak the sago two hours in a little warm water; add it to the stock, previously warmed, and let them simmer gently one hour, stirring often. Beat the yolk with a little of the warm broth, add it, let it boil up once, season to taste, and serve.

This is a nice broth, simple and nourishing. Eat with dry toast.

Recipe 161.

SMOKED-BEEF BROTH.

Chipped beef – –	one-half pound;
Cold water – – –	one pint;
Sweet milk – – –	one pint.

Put the beef into a double boiler, and cover with cold water. Let it heat slowly—it must not boil.

When it has simmered for an hour add the pint of milk, which has already simmered in another vessel, and then remove it from the fire at once. Strain and season to taste.

If this should become cool it may be rewarmed, in a *double boiler*, but it must not *boil*. Boiling will curdle the milk.

After an attack of of biliousness or of sea-sickness, this is easily retained by the enfeebled stomach, and it is very refreshing.

Recipe 162.

MOCK CLAM-SOUP.

Take a piece of codfish four inches square; boil it for fifteen minutes each time, in two or three waters. Then pour off all the water and cover it with one pint of cold milk and one pint of cold water; boil for one-half hour, and strain. Season to taste.

This makes a very good substitute for clam soup. It may be made stronger or weaker to suit the palate.

Recipe 163.

CREAM OF CELERY.

Soup stock – – – – one quart;
Celery – – – – three stalks;
Cream – – – – – one-half pint.

Cut the three stalks of crisp celery into half-inch pieces and put them into a sauce-pan; add one-half of the stock, and boil for one hour. Now strain all through a sieve, rubbing the celery through, putting the pulp thus obtained, together with the broth, into a sauce-pan, and add the other pint of stock; boil; set on one side of the stove to keep hot.

Boil the cream, and add it to the soup, stirring all the time. Season to taste with salt and pepper, and serve with small pieces of toast.

Miscellaneous.

Recipe 164.

BAKED POTATO.

Select a nice potato, and bake it in the usual manner. When it is done, cut off one end. With a fork carefully scoop out the contents of the potato from the skin; season it with pepper, salt, a little butter and a teaspoonful of cream; beat it up with a fork until very light, and then put it back into the skin from which it was removed. Let it brown over the top in a quick oven, and then serve.

This is a nice way to serve potato for an invalid or convalescent. By holding the potato in a napkin it can be easily managed with a fork.

Recipe 165.

CRACKER GRUEL.

Crumble a soda-cracker into a cup of cold milk; let it stand two or three hours. Now put it into a saucepan with another cup of cold milk; add pepper, salt, and a teaspoonful of butter. When it comes to a boil, drop in a whole egg. Remove instantly from the fire and beat until it is light.

Recipe 166.

UNLEAVENED WAFERS.

Mix good, dry flour to a stiff dough with milk (water can be used) and a little salt; roll out thin. Cut into round cakes, and roll these again almost as thin as letter-paper. Bake very quickly.

These are simple, palatable, and go well with all kinds of broths and soups. Try them.

Recipe 167.

CREAM LEMONADE.

White of one egg;
Juice of one lemon;
Some chopped ice;
3 teaspoonfuls fine sugar;
4 tablespoonfuls cream.

Beat the white of the egg to a dry froth, add the sugar and strained lemon-juice, beat well together and pour into a tumbler half-full of chopped ice. Now slowly fill the tumbler with cool sweet cream, while constantly stirring the mixture.

This is tempting, refreshing and nourishing.

Recipe 168.

ICELAND MOSS LEMONADE.

Iceland moss – – –	one teacupful;
Boiling water – – –	one quart;
Lemons – – – –	two;
Sugar and ice – – –	sufficient.

Wash the moss in five waters; pour the boiling water on it, and leave till cold. Add the lemons, peeled and sliced, leaving out the peel. Sweeten well, and add ice. Do not strain. If it thicken too much, add cold water.

This is a nice lemonade to be used in pulmonary disease, to allay thirst and cough.

Recipe 169.

SLIPPERY-ELM TEA.

Break the elm-bark into bits, pour boiling water over it to cover, and let it stand till cold; sweeten and add ice. A little lemon-juice may be added.

Recipe 170.

COUGH SYRUP.

Strain the juice of three lemons, and add as much sugar as can be moistened in it; then add six tablespoonfuls of cold water, and one teaspoonful of powdered gum-Arabic. Let it simmer over a slow fire until the sugar is melted. When a smooth syrup is formed, remove, and allow it to cool.

This can be given in teasponful doses, to allay cough. It can be made without the gum-Arabic if this is not at hand. It is easy to make and easy to take, and so simple that no physician will object to its use.

INDEX.

Albumen-water..... 43
Alcoholism, diet in..... 109
Alcohol in fevers..... 50
in heart disease..... 108
Alimentation, rectal..... 72
Alkali in milk..... 24
Alkaline drink..... 105
Apples, baked..... 71
Apple-water..... 69, 125
Arrowroot..... 16
jelly..... 121
Asparagus..... 139
Asthma, dict in..... 106
Austen, Miss..... 57

Baby, to nurse..... 37
to wean..... 39
to feed..... 41
Baked potato..... 155
Banting..... 16
Barley-water..... 30, 130
Bartholow, Dr..... 13
Beale, Dr..... 65
Beef..... 13, 76
essence..... 137
broth..... 53
Beef-tea, in cholera infantum..... 42
recipes..... 51, 150
Beverages..... 123
Biliousness, diet in..... 117
Bisque..... 153
Bonny-clabber..... 57
Bottle, care of..... 34
Bouillie..... 139
Bouillon..... 137
Buttermilk..... 49

Blanc-manges..... 143
Bran-water..... 88
Breads..... 140
Bread, brown..... 62
jelly,..... 45, 142
rice..... 140
sauce..... 71, 142
unfermented..... 63, 141
Bright's disease, diet in..... 90
Broth, chicken..... 151
mutton..... 150
sago..... 153
smoked-beef..... 154
Broths..... 135, 147
Butter..... 18

Cafe-au-lait..... 133
Casein..... 23
Celery, stewed..... 140
Chambers, Dr..... 90
Charlotte russe..... 145
Cheese..... 14
Chicago water..... 27
Chicken..... 14, 118
broth..... 53, 151
jelly..... 146
soup..... 136
Chlorosis..... 103
Cholera, diet in..... 113
infantum..... 40
Churchill, Dr..... 82
Clabbered-milk..... 15
Clam-soup..... 154
Clark, Sir C..... 21
Cod-liver oil..... 18, 80
in consumption..... 77

Cod-liver oil, in scrofula..... 100
Codfish..... 59
Coffee and egg..... 133
Collapse..... 103
Condensed milk..... 23
Constipation, diet in 66
Consumption, diet in..... 75
Convalescence, diet in 117
Corpulent, diet for the..... 97
Corn..... 17
Corn-starch..... 16
Cottage-cheese..... 122
Cough-syrup..... 157
Cracker gruel..... 156
Crackers..... 59
Cream..... 18
Cream lemonade..... 156
Cream of celery..... 155
Cream of rice 151
Curd 23
Custard..... 143
arrowroot..... 142

Diabetes, diet in..... 83
milk cure 89
Diarrhœa, diet in..... 110
chronic..... 111
Digestion, aids to..... 64
Digestive fluid..... 65
Diphtheria 114
Dysentery, diet in..... 110
Dyspepsia, diet in..... 55
Dyspepsia-crackers..... 59

Eggs..... 14, 112
Egg and coffee..... 115
Egg-nogg..... 52, 115, 134
Eggs and milk..... 91
Egg-water..... 133
Elm-tea..... 132
Enema, beef-tea..... 73
blood..... 74
cod-liver oil 75
milk..... 73
Ewing, Mrs. E. P..... 56
Extract of meat..... 103

Farina blanc-mange..... 141
Fats..... 18, 23
Fevers, diet in..... 47
Fish..... 14
Flint, Dr..... 13
Florence Nightingale..... 31
Flour-ball 44
Foods..... 11
classification of..... 12
organic..... 12
inorganic..... 19
nitrogenized,..... 12
non-nitrogenized 15

Game 118
Gastritis, diet in..... 116
Gelatine..... 15, 26
charlotte russe 145
jelly 145
Gluten bread..... 86
cakes. 87
flour 85
gems..... 86
mush..... 87
pudding..... 88
wafers..... 88
Goat's milk..... 22
Graham flour..... 17
Gravel, diet in..... 92
Graves, Dr..... 47
Green-sickness..... 103
Gruels..... 137
Gruel, arrowroot..... 138
cornmeal..... 137
farina..... 138
oatmeal 137
rice 139
sago..... 138
Guillot, M..... 41
Gums..... 18
Gum-water,..... 26

Heart-disease, diet in..... 108
Hominy..... 71
Hypophosphites..... 82

Iceland-moss jelly..... 145
Iodine..... 18
Inunctions..... 18
Iron..... 19

Jaundice 117
Jelly-water 125

Koumiss 78

Lemonade 129
cream 157
egg 129
flaxseed 128
hot 129
Iceland moss 128
Lemon-ice 129
Lemon-whey 126
Lime-water 27
Litmus-paper 32

Malt infusion 65
extract 82
Marion Harland 60
Meats 13
salted 14
Meat, extract of 137
raw 112
Milk 15
of wet-nurse 38
in Bright's disease 90
butter 15
clabbered 15, 60
cow's 23
condensed 23
in diabetes 85
in fevers 48
goat's 22
and lime-water 27
punch 130
thickened 111
toast 119
Mock clam-soup 154
Musculine 13
Mutton 13
broth 52, 150
chops 118
Mush 70, 71

Niemeyer 91

Oatmeal 17
gruel 49, 70
water 29, 68, 131
Œsophagus, stricture of 73
Oils 17
Oil, olive 18
Omelette 118
Oysters 14
Oyster-broth 135

Panada, bread 141
cracker 142
Pepsin 64
Phosphate-of-lime 19
Porridge 69
Pork 14
Potato, baked 155
Potatoes 17, 139
Potato-surprise 119
Pridham, Dr 107

Raspberry syrup 124
vinegar 124
Recipes 123
Rennet wine 134
Rheumatism, diet in 104
Rice 111
Rice-flour milk 131
Rickets, diet in 101
Routh, Dr 41
Ruddock, Dr 103
Rusk 141

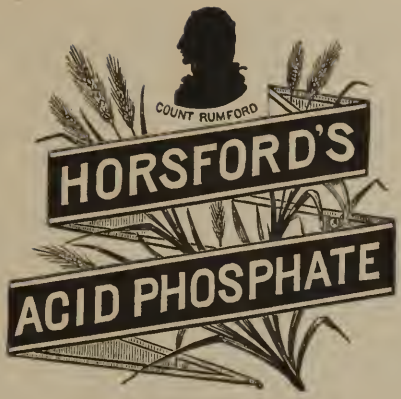
Sago 16
blanc-mange 121
broth 153
custard 112
milk 131
Salt 19, 28
Salts, in milk 24
Salter, Dr 107
Scarlet-fever, diet in 54
Schmier-kase 61
Scrofula, diet in 100
Scurvy, diet in 102
Sea-sickness, diet in 95
Seasonings 152
Soups 135
Soups and broths 147
Soup, chicken 136
raw beef 136
veal 136
Smoked-beef broth 154
Spanish cream 112
Starches 16

Stock 147
Stomach, ulcer of 116
inflammation of 116
Strawberry syrup 124
Sugar 16
Sugar-of-milk 24, 27

Tamarind-water 69
Tapioca blanc-mange 144
jelly 143
pudding 144
water 131
Tissue-builders 16
Toast 56
water 132
Tomato-soup 119
Travelers, diet for 93
Typhoid fever 53
Typhus fever 54

Veal 14
Vegetables 139
Vogel 25
Venison 14

Wafers, unleavened 62, 156
Water 19, 27
Chicago 27
Waukesha 27
Wet-nurse, to choose 37
Wheat 17
Wheaten grits 70
Whey, wine 43
lemon 125
powder 126
rennet 134
to whiten 126
White soup 152
Wine-whey 43, 126



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